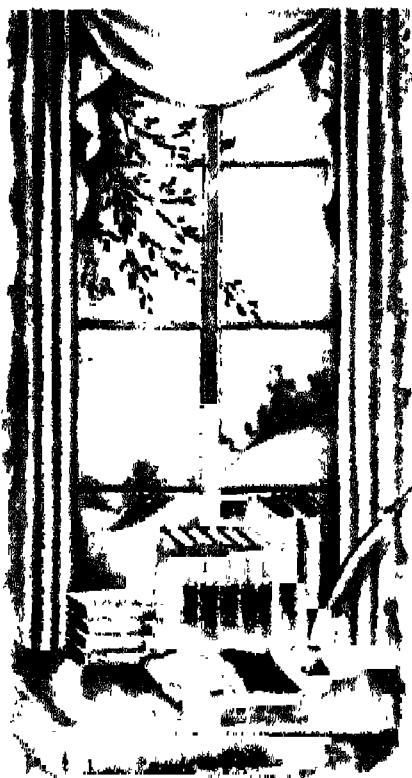


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"READING, MAKETH A FULL MAN"  
James R. Lawler



**SUPERVISION**  
**IN THE**  
**SECONDARY SCHOOL**

**BY**

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**D. C. HEATH AND COMPANY**

**BOSTON  
ATLANTA**

**NEW YORK  
SAN FRANCISCO  
LONDON**

**CHICAGO  
DALLAS**

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## PREFACE

*Supervision in the Secondary School* is an attempt to formulate, interpret, and apply to the problems of secondary-school supervision a democratic philosophy of education. The authors envisage the primary task of a supervisor to be that of encouraging and assisting his teachers to organize the details of teaching in harmony with the larger purposes of the secondary school. This carries with it as a corollary promoting the growth of a teacher's personality and enhancing the dignity of the teaching activity itself.

The ultimate concern of every school is, of course, the pupil. His welfare and the stimulation of his growth and development in the direction of a worthy adulthood constitute both the test and the chief justification of administrative organization and supervisory methods and techniques. Educational theory is barren and technical proficiency is as sour wine unless the pupil by virtue of these efforts grows in wisdom and understanding and enters progressively into socially meaningful relationships with his fellows.

It is for this reason that the authors stress the implications of democratic supervision for teacher growth and the understanding and guidance of pupils. Much has been written in recent years describing different types of supervisory organization. Manuals and compendia of existing procedure are not wanting. While recognizing the necessity for deriving specific help from existing practice (and indeed advocating its use at appropriate times), the authors believe there is need for a philosophy of supervision that will give perspective to the practical details of teaching. It is not intended, however, to ignore the administrative aspects of supervision. In Part IV and in other sections of the book

these problems are approached from the same fundamental point of view.

It is hoped that the book will stimulate the reader in formulating for himself a consistent body of theory and practice. Accordingly, Part I deals with the definition of the supervisor's relation to his teachers. Certain dominant conceptions of this relation, as exemplified in practice, are examined and a positive statement of a democratic conception is formulated with its implications in supervisor-teacher relationships. In Part II the democratic point of view is applied to the solution of practical problems in supervision, such as lesson planning, rating a teacher's worth, visitation and conference, and curriculum construction. A third phase of the supervisor's responsibility relates to the guiding and directing of pupil growth. This, of course, he can do only through instrumentalities other than direct contact. However, there rests upon him always the obligation to exercise his influence along lines that will stimulate the healthy and normal all-round development of boys and girls. He must assist his teachers to distinguish between the means and the ends of education and he must strive to establish coöperative efforts and clear understandings between teacher, pupil, and parent as individuals, and between the school and the home as institutions. Consequently, problems of teaching procedure, educational guidance, and the relations between school and home receive consideration in Part III. Finally, in Part IV, the problems involved in the general organization of supervision and the stimulation of teacher growth through the organization of the school receive consideration.

The authors acknowledge gratefully their indebtedness to the writers and the publishers whose works are cited in the discussion. They are privileged, in this connection, to quote from the following: D. Appleton and Company; Bureau of Educational Research, University of Illinois;

Bureau of Educational Research, Ohio State University; Bureau of Publications, Teachers College, Columbia University; The Commonwealth Fund, Division of Publications; The John Day Company; Doubleday, Doran and Company; The University of Chicago, Department of Education; Ginn and Company; Harcourt, Brace and Company; Harvard University Press; Henry Holt and Company; Houghton Mifflin Company; The Johnson Publishing Company; The Macmillan Company; *Modern Language Journal*; National Association of Secondary School Principals; the National Committee for Mental Hygiene; National Education Association; Department of Superintendence of the National Education Association; Research Division, National Education Association; the *New Republic*; W. W. Norton and Company; Progressive Education Association; Public School Publishing Company; The Science Press; University of London Press; Warwick and York; World Book Company; Yale University Press.

In addition to the individuals specifically quoted, they wish to acknowledge in particular their obligation to Professor Boyd H. Bode, who stands in the relation to them of philosopher, guide, and friend.

H. B. ALBERTY  
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# INTRODUCTION





## CHAPTER I

### THE BACKGROUND OF SECONDARY-SCHOOL SUPERVISION

Much has been written in recent years regarding the necessity of organizing secondary education with reference to the needs of boys and girls in an industrial civilization. In the literature of supervision, however, one will encounter surprisingly little emphasis upon the tentative and experimental nature of teaching which this period of transition obviously implies. The supervisor's function is more commonly interpreted from the standpoint of the efficient administration of details and the meticulous scrutiny of a teacher's performance in the light of objective and scientific criteria. Important as this is, it represents only a portion of the supervisor's total responsibility.

May we therefore outline briefly, as an introduction to the chapters that follow, some changes in contemporary living which we believe should constitute the background of supervision.

From one point of view we may say that the difference between the traditional and the modern school consists in the seriousness with which each conceives its function. The conventional school acts as a supplementary agency, leaving to the home and community major responsibility for organizing and directing the unifying and integrative influences that bear upon the child. To these influences it adds a training chiefly intellectual in character and designed primarily to prepare for adult life. The modern school, on the other hand, is steadily assuming responsi-

bility for educating the "whole" child and conceives its function to be that of an interpretive and orientating agency in a rapidly changing civilization.

This new point of view regarding the purpose of the school derives in large measure from the fact that an institution which served fairly well the needs of a rural and an agricultural economy is inadequate in a dominantly industrial civilization.

Take, for example, the part which the school plays today in equipping the individual to secure a new deal in life. Open roads to opportunity have characterized American life from its earliest beginnings, but there was little conscious relation of this phenomenon to schooling until the westward flow of population was first checked by the disappearance of free lands and then turned in the direction of the city. The handicapped Negro leaves the South today much as his disfranchised white brother a century or more ago migrated from the East to the open country of the West, but the Negro crowds into an already congested industrial center. This is typical of the drift of population generally. Census figures indicate that 22.2 per cent of our entire population live in states other than those in which they were born.

Mobility of population testifies to the lure of new opportunities. Ready means of transportation and communication — the railroad, the automobile, the aeroplane, rapid postal service, the telephone, the telegraph, and the radio — accentuate the dramatic appeal of the new. The lure of economic opportunity in distant fields was never so enticing as at present and never, apparently, so easy of realization. No one can tell, of course, how the percentage of individual failures compares with former times. The significant point is the existence of attractive opportunities for a fresh start in life. These clearly exist and are exaggerated in importance by rapid transformations in business and industry.

A change in methods of photography, for instance, revolutionized overnight the entire motion picture industry and the movietone has well-nigh rendered valueless all of the inventiveness and effort that went into the art of the silent film. What is true of the motion picture industry holds true of virtually every line of business. Students of industrial life tell us that never before were transformations of methods and processes so rapid as in the present and that in many respects we can say that the industrial revolution has just begun. We know not what changes lie before us, but of this there is no doubt: these changes are in the direction of an increasingly complex civilization.

These obvious facts have profound significance for education.

Most evident has been a lengthening of the period of general education. This is reflected in the revolutionary changes that are taking place in secondary-school enrollments. Thus, a high-school enrollment that in 1890 consisted of 1.6 per cent of the total elementary and secondary school population had increased to 15.2 per cent of this population in 1926. More startling is the growth of the secondary school in the past ten to fifteen years. In 1918, for example, the secondary school enrolled 28.29 per cent of our population between the ages of fifteen and eighteen. By 1926 this proportion had grown to 53.12 per cent. Thirty years ago the terms "common school" and "elementary school" were synonymous. Today we may appropriately designate the secondary school as the common school. Moreover, this secondary school is reaching upward to include the two years of the junior college, and in a short time we may expect the conclusion of a general education to imply graduation from a junior college. Those progressive communities that have already incorporated the junior college as an integral part of their public-school systems are merely shaping the structure of the school in

accordance with the principle (the principle which underlies compulsory school-attendance laws) that the American people are committed to universal education for all normal adolescent boys and girls.

Not quite so obvious, perhaps, is the transformation taking place in vocational education. The curriculum of the early academies, with its provision for training in subjects such as surveying, bookkeeping, principles of teaching, civil engineering, navigation, Blackstone's *Commentaries*, vocal music, architecture, and so forth, affords ample evidence of the early interest of the secondary school in the vocational preparation of its students. However, vocational education was once a simple matter of adding to or supplementing formal schooling with a specific vocational skill. There was in the beginning little interrelationship between general education and vocational or pre-vocational training.

Specific vocational training still persists in our schools, and probably there will continue to be children who, for practical reasons, must needs be introduced at a tender age to a specific trade. But this should be looked upon as a necessary evil, as vocational training, and not as a vocational education in harmony with the conditions of successful adjustment to modern industry.

Specific preparation for a trade was perhaps appropriate in a rural economy when processes were simple and when life outside of school laid broad preliminary foundations. G. Stanley Hall points out in his essay on *Boy Life in a Country Town* that as late as the middle of the nineteenth century a boy in a Massachusetts town picked up in his home and community activities the rudiments of some sixty trades. The fact that Jacks-of-all-trades once existed indicates, of course, that we did not have to penetrate far below the surface in order to find lines of identity connecting different vocational activities. But what is

the situation today? The census of 1920 reported some 20,000 vocations. It is impossible, if we would, to give specific vocational training for this number of occupations. Furthermore, in the light of what has been said regarding revolutionary changes in industrial operations, it is hazardous in the extreme to train young people for a narrow niche in society. An entire industry may flourish today, and tomorrow cast its skilled workers upon the industrial scrap heap.

It is for this reason that a number of schools are identifying at least pre-vocational preparation with the problem of general education and are endeavoring to lay the basis for later vocational choice and vocational preparation by equipping students with a knowledge of fundamental principles and processes that link up a wide variety of practical operations. In this way the school hopes to aid boys and girls in the development of a capacity for flexible adjustment to a changing situation.

Our industrial civilization requires that the school extend the period of general education and broaden its conception of preparation for a vocation. It also demands a constructive program with reference to certain disintegrating influences in contemporary living.

These disintegrating influences we discuss at some length in Chapter XVIII. They derive from the fact that the influences of our industrial civilization are transforming those institutions that have in the past functioned as the primary integrating and orienting influences in the lives of the young. In work and in play, in the serious and the lighter relationships of life, the two generations — parents and children — are finding it increasingly difficult to understand one another; and the traditional instruments, the home, the church, and the local community, which society once utilized to transmit the racial inheritance, no longer serve this end as effectively as they once did.

These conditions we believe should define the major objectives of the school. We cannot, of course, discuss at this point the details of the curriculum. We must content ourselves with indicating two or three large purposes that should give direction to the work of the school.

The first of these we have already mentioned in passing. The conventional school, it was said, has functioned as a supplementary agency. The modern school must serve as an interpretive agency. In conjunction with the home and community it should strive to orient the child in his world, to assist him to weave unity and purpose into his life. This is the outstanding obligation of the school. The aim is universal in its application although the means utilized will vary with local needs and conditions.

The so-called activity programs which characterize the work in progressive elementary schools grow out of this recognized need for orienting the child in his world. As against the traditional study of a textbook and the learning of the abstract material that prevailed a generation ago, these schools engage pupils upon meaningful units of work. For example, in reproducing typical phases of primitive life, the pupils gain insight into the significance of the importance of basic activities and relationships of people today. Moreover, these units of activity avoid the fragmentary character of traditional education within the classroom. A transportation unit, a study of wool, a comparison of country and town life, or running a grocery store, coördinate shop-work, art, music, sewing, cooking, and the like as well as the so-called tools of reading, writing, and arithmetic. Children secure from school experiences of this character a first-hand contact with things and some conception of how man, the adventurer, has won for himself food, clothing, and shelter and the possibilities of rich living. Similarly, in later years, in the social studies, for example, pupils derive from further investigation additional insight

into life. As against an unrelated collection of facts they study such people as the Greeks or the Egyptians, or perhaps a period of history, such as Medieval Civilization or the Industrial Revolution, in order to secure vivid pictures of what people did and thought and felt under different circumstances. They thus come to appreciate that human beings have created significant values and ideals out of crude and forbidding conditions of existence and they at least prepare the ground in their own minds and characters for a realizing sense that human beings are constantly employed in weaving the conditions of much of the good and the evil which they share. They should not be misled into believing that progress is constant and inevitable, but they can be led to sense the implications of the fact that wherever progress exists there human beings are also found laboring to bring it about and to sustain its existence.

When the foundations are laid in the elementary school for numerous and varied interests, education in the period of adolescence can quite appropriately develop for the pupil the cultural and vocational implications of his special abilities and interests. This is quite different from saying that the subjects a pupil studies must carry him no farther than their practical bearings, and it is diametrically opposed to the traditional view that a liberal education must carefully avoid a speaking acquaintance with vocation. It means rather that when attention is centered upon utilizing the subjects of the secondary school to care for individual differences as between pupils, then conventional subjects, such as science, literature, history, and the like, will be viewed as plural subjects, each with interesting applications to pupils of varied interests and abilities.

"Orientation" and "interpretation" thus constitute the key words for education. The character of this orientation is relative to the age level of the pupil, but it should influence methods and procedures, and the organization

and selection of subject matter in all courses of study from kindergarten to college.

A second fundamental purpose of the school should be to develop effective tools of procedure. These are far more important products of education than information, although, of course, we cannot develop habits of study and inquiry from working with worth-while materials of learning without at the same time acquiring valuable information. Conventional education puts the cart before the horse. It centers first upon inculcating certain facts and points of view and only secondarily upon methods of procedure.

In this respect the modern school meets the wishes of neither the radical nor the conservative, for they both assume that education is identical with propaganda. They may differ as regards the conclusions they believe should be taught, but at least they are at one in their wish to impress upon the child predigested conclusions. A wiser practice recognizes that society never remains as it is, that change is inevitable and, in consequence, the greatest service the school can render the young is not so much to formulate conclusions for them as it is to train them in the use of the most adequately tested tools of inquiry and investigation. It seems to be increasingly evident that young people of today, despite what their elders may do, are prone to arrive at their own decisions. It is well, therefore, for the older generation to concentrate upon equipping the younger with well-tempered and tested tools of intellectual inquiry rather than with predigested conclusions.

A third essential in education is an ever-growing sensitiveness and responsiveness to others. The individual in this modern world tends more and more to attain to his individuality as a member of a group. Consequently it is incumbent upon the school to organize life within the school so as to develop a sympathetic and intelligent regulation of conduct with reference to others.



This social sensitiveness should operate both consciously and unconsciously. A school that encourages pupils to associate in joint learning activities, to participate in planning and conducting the extra-curricular life of pupils, to devise and carry out ways and means of helping the less fortunate, and causes children to pause frequently in the midst of contemplated action in order to trace out in imagination the far-reaching consequences of their action, moves in the direction we are urging.

What we propose is difficult to realize in a world that shifts its standards as rapidly as has ours, but fortunately teachers and pupils can build for the future more wisely than they know. For example, suppose we desire to develop in pupils the spirit of cöoperation. Intellectually, and in the realm of habit and disposition, adults are hampered by individualistic notions and individualistic training. To them there is a genuine incompatibility between self-interest and group conformity. But, perhaps, if children's experiences from the kindergarten through high school are organized in such wise that in the actual business of living they recognize on one occasion the individual's right to differ from the group and under different circumstances the value of conformity to group judgment, they will themselves come to reconcile in their lives what is to their elders a genuine dilemma; and they will moreover mount to a level of coöperative development beyond the vision of their teachers.

This is by no means an exhaustive list of the objectives that should determine teaching in the secondary school. Nevertheless significant progress will have been made in the direction of education for democratic living when the school concentrates upon the task of (1) creating conditions of work and play that will enable boys and girls to advance steadily in the direction of a "reasoned-out ideal of progress," (2) equipping them with methods and proce-

dures of effective work and seasoned thinking, and (3) stimulating the development of a sympathetic imagination and a social sensitiveness so that, while acting with independence and fearlessness of judgment, they will at the same time be considerate of the implications of their actions for others.

Hurried and sketchy as is the above account of the changes now in progress in the secondary school, it is sufficient, we hope, to justify the major thesis of the authors of this book. They believe that the problems confronting the secondary school are of such a character that teaching and supervision cannot afford to proceed by rule-of-thumb methods. They believe that the secondary school-teacher who meets adequately his responsibilities is called upon to exercise inventiveness and originality, and to marshal the results of scientific study in unique ways so as to meet the peculiar conditions surrounding and defining the individual pupil. And they believe that it is the peculiar responsibility of the supervisor to function as an educational leader in realizing the interpretive and integrative purposes of the secondary school. He it is who must assist his colleagues (the members of his teaching staff) to face with a comprehensive vision the problems of reorganization in the secondary school and, in this transitional stage of secondary education, to aid them to organize the subject matter and the methods of their teaching so that their pupils may participate meaningfully in a changing civilization.

It is not true, however, that this represents the conception of supervision running through common practice. Indeed it is not at all certain that a consistent theory of supervision operates in common practice. In a most thoughtful article in *Educational Method* on "Changing and Conflicting Conceptions in Supervision," O. G. Brim<sup>1</sup> has shown that five conceptions of supervision determine at one time

<sup>1</sup> Volume X (December, 1930).

or another the actions of the supervisor. He shows, moreover, that an analysis of the present literature on supervision reveals not only disagreement as between authors but also inconsistency in the writings of one and the same author. These conceptions, according to Brim, are: the supervisor as teacher trainer, the supervisor as inspector, the supervisor as helping teacher, the supervisor as scientist, and the supervisor as educational leader.

The difference between Brim's classification and the one adopted for examination in this book is a difference of form rather than of substance. Nor do we disagree with Brim when he concludes that, as against an eclectic policy of borrowing on occasion now from one authority and now from another, the supervisor should attempt to formulate and apply his own philosophy of education. As Spinoza long ago remarked, however, "all things excellent are as difficult as they are rare." A philosophy of education is one of those excellent goods which requires for its perfection both experience and that cold light of thought which can look back upon experience and construct a future out of a past modified by what is novel in the present.

As raw material for the reader's own philosophy of education, the authors submit herewith the results of their experience and contemplation. Hence, they begin their discussion with an examination of certain common conceptions of the relationship that obtains between supervisors and teachers.



# Part I

## THE SUPERVISOR LOOKS AT HIS JOB



## CHAPTER II

### PREVAILING CONCEPTIONS OF THE SUPERVISOR'S FUNCTION

It has been said on good authority that as a man thinketh in his heart so is he. An application of this doctrine to the problem of supervision in the secondary school implies that what a supervisor conceives *should* be his relation to his teachers will find expression in the details of his work. It will determine in part, at least, whether the trivial and the ephemeral or the significant and the fundamental will occupy his major attention. It will influence him in the budgeting of his time. It will determine the sources of his own improvement and inspiration. In short, it will regulate the ordering of his own life and indirectly that of his staff. Mr. Gilbert Chesterton once wrote:

There are some people, and I am one of them, who think that the most practical and important thing about a man is still his view of the universe. We think that for a landlady considering a lodger it is important to know his income, but still more important to know his philosophy. We think that for a general about to fight an enemy it is important to know the enemy's numbers, but still more important to know the enemy's philosophy. We think the question is not whether the theory of the cosmos affects matters, but whether in the long run anything else affects them.<sup>1</sup>

In accordance with this view it is wise to preface an analysis of the supervisor's functions by a description of certain typical conceptions of supervision. We do not imply that an individual supervisor may easily be labeled

<sup>1</sup> *Heretics*. New York: Dodd Mead and Company, Inc., pp. 15-16.

as a representative of one and only one of these conceptions. Consistency is not altogether characteristic of human behavior. There are, however, at least four general or major attitudes toward supervision which supervisors assume. These we shall examine for the purpose of indicating some of their implications in a program of supervision.

For convenience we shall term these attitudes: (1) The Let-Alone or Leisure-Time Conception of Supervision, (2) Autocratic Supervision, (3) Objective and Scientific Supervision, and (4) Democratic Supervision.

We shall discuss the first two in this chapter and devote later chapters to the third and fourth.

1. *The Let-Alone or Leisure-Time Conception of Supervision.* It is not in politics alone that one discovers strange bedfellows. The practitioners of the let-alone conception of supervision agree in a method<sup>2</sup> which finds its justification under quite different circumstances.

There are conscientious principals and heads of departments who resort to the leisure-time or odd-moment method because they are genuinely impressed with their own limitations. They realize that the special training and the specialized experience of teachers under their jurisdiction have frequently given these teachers a familiarity with the subject matter of their teaching which is far more detailed and precise than a mere outsider could possibly acquire. As modest individuals they hesitate to play the fool and to rush in where angels fear to tread. Consequently they carefully refrain from projecting their judgments into teaching situations. In their hearts they may yearn for the self-confidence of that normal-school president who stated, "When I am unable to teach better than any critic teacher in my practice department or any instructor in a

<sup>2</sup> Only for purposes of discussion do we term the procedure a "method" which permits teachers to succeed or fail pretty much as circumstances permit.



subject-matter department of my school, I shall be ready to resign my position"; but since they can bear witness at present to no such omniscience and omnipotence, they are willing that their teachers should go it pretty much alone.

The second occupant of the supervisory bed of inactivity rises on gala occasions. He is the "glad hand" and inspirational supervisor. Teachers' institutes and educational association meetings are strenuous moments in his life. He understands his duty to be primarily that of dispensing inspiration. For him supervision plays much the same rôle as that patriotism which manifests itself at Fourth of July rallies, or the religion of the pious business man who professes his faith on Sunday and practices business as usual on week days. Such a supervisor does not descend into the unattractive details of directing teaching or helping his teachers to solve their problems in concrete situations. He adheres rather to the conception of the supervisor's function which Coffman has quoted: "The business of the supervisor is to cast a genial influence over his schools, but otherwise he is not to interfere with the work."

Still a third reason for the existence of an inactive type of supervision is the very common and widespread absorption of supervisors in routine duties and clerical details which for one reason or another cannot be delegated to clerks or appropriate subordinates. Particularly does this penny-wise-and-pound-foolish policy prevail in small school systems. School boards in many cities and rural districts are manned by business men whose experience in their own line of work is not such as to develop in their minds a basis for an appreciation of the value of professional supervision. Indeed their connection with the administration of the school is often their only contact with a business organization of any considerable magnitude. Consequently the hampering conditions which they impose upon the supervisor are genuine and difficult to remedy.

When due allowance is made for this condition, however, it still remains true that failure on the part of many supervisors to exercise supervisory functions results as much from the fact that they make no effort to budget their time with an eye to the essentials of their task as it does from a genuine requirement that they serve their communities primarily in the capacity of clerks. The very existence of littered desks and unimportant details clamoring for attention permits them to anoint their guilty consciences with the least important phases of their work. They shed pious tears over their inability to deal with "the big things," but actually they derive secret satisfaction from their success in using these details as smoke screens for their haunting sense of ineffectiveness. That is to say, petty details and office routine are rationalized into excuses for letting teachers alone just as in our first case a sense of inadequateness in the subject-matter fields of secondary education operates to justify inactivity.

2. *Autocratic Supervision.* A college professor of education is reported recently to have given the following rules to a class of prospective teachers as key instructions for successful teaching:

First: Be master of the situation from the moment you step into the room.

Second: Be sure you know your pupils before they know you.

These instructions presuppose the traditional attitudes of hostility and suspicion between teacher and taught which have long characterized American schools. They merely substitute reliance upon ready wit for the physical prowess which was once the prime essential in a well-prepared teacher. It is true, of course, that there are occasional schools in which it is still expedient for the teacher to open the term by subduing the biggest boy in the room, or where an unmistakable demonstration of force is con-

sidered to be the necessary first stage in the development of the learning process. Nor is it in remote backwoods schools alone that the advice is still pertinent which Mr. Means gave to the Hoosier Schoolmaster:

"You see," continued Mr. Means, spitting in a meditative sort of way, "you see, we a'n't none of your saft sort in these diggin's. It takes a *man* to boss this deestrick. Howsumdever, ef you think you can trust your hide in Flat Crick schoolhouse I ha'n't got no 'bjection. But ef you git licked, don't come to us. Flat Crick don't pay no 'nsurance, you bet!" "Any other trustees? Wal, yes. But as I pay the most taxes, t'others jist let me run the thing. You can begin right off a Monday. They a'n't been no other applications. You see, it takes grit to apply for this school. The last master had a black eye for a month. But, as I wuz sayin', you can jist roll up and wade in."

On the whole, however, this typifies the school of the past rather than the present relationship of teachers and pupils. By and large the American schoolboy and school-girl have become outwardly at least much more docile and tractable. They have adopted more refined methods of testing a new teacher. They have changed the rules of the game, but the game, the contest between teacher and pupils for mastery, is only too commonly played.

Fortunately even this relationship is passing and in the best schools the spirit is the direct reverse of that described. The point we wish to make here is that this early attitude has most profoundly influenced the organization and administration of our schools. The necessity for the master to *rule* over his pupils gave to the school an autocratic character quite out of harmony with democratic conceptions of life. A certain virtue became attached to forcing a pupil to do what he did not want to do and discipline was thought of as something distinct from methods of teaching. Consequently discipline even today becomes an

end in itself, and ignorant or unskillful teachers are rated as successful if they "maintain discipline." Indeed, "good discipline" too frequently conceals a total ineptitude either to understand or to assist the normal development of boys and girls into responsible citizens.

This exercise of authority was by no means confined exclusively to the teacher-pupil relation. It was to be expected that when the schoolmaster in Flat Creek required an assistant, he should rule his subordinate in much the same manner as he governed his pupils. Often assistant teachers were little better educated than the children they taught. They were migratory workers with all the lack of a sense of responsibility which characterizes the transient. They moved from district to district. Young men considered teaching merely as a stepping stone to a business or a professional career, while women taught in the breathing spell preceding marriage. They were ill paid and poorly housed. They had little respect for their occupation and no appreciation of teaching as a science or a profession.

Under these conditions superintendents, principals, and boards of education in charge of elementary and secondary schools quite naturally sought continuity in educational procedure through the obvious and easy method of externally imposed rules and regulations and courses of study which were to be followed without deviation or exception. Supervision under this system, in so far as it involved classroom visitation, resolved itself into an official inspection for determining the degree to which teachers fulfilled expectations and requirements.

A survey of the scholarship and preparation of secondary-school teachers at present will explain, if not justify, a natural tendency on the part of supervisors to continue the imposition of arbitrary standards of teaching upon their teachers.

Take, for example, the conditions of teacher turnover in secondary schools. The Biennial Survey of Education for 1916-1918<sup>3</sup> indicates that in Delaware, forty out of eighty-one teachers in schools for whites were teaching for their first year, and only nine had taught for more than four years. In 1923, in Ohio, according to a study conducted by G. G. Starr, more than one-half of the teachers in that state had taught less than three years.<sup>4</sup> In Utah, in 1922-1923, one-half of the high-school teachers possessed less than four and one-half years' experience; and in Indiana in 1923, 36 per cent of the regular and special teachers in senior high schools had been in service less than five years, while 10 per cent were teaching for the first time.<sup>5</sup> Ninety per cent of the teachers in Wisconsin have taught less than ten years, while 67 per cent have taught three years or less in their present location.<sup>6</sup>

A heavy teaching turnover and the migration of teachers from school to school constitute grave handicaps for effective supervision and teaching. More serious, however, is the lack of preparation on the part of teachers for the subjects they are teaching. In the Sachs Prize Essay for 1926, Hutson<sup>7</sup> presents data to show that in the process of migrating from school to school teachers are constantly undertaking the teaching of unfamiliar subjects. In Pennsylvania, California, and Minnesota, for example, the percentage

<sup>3</sup> U. S. Bureau of Education, Bulletin, 1919, No. 90.

<sup>4</sup> *A Study of the Training, Experience, Tenure, and Salary of the Teachers of Ohio*. Master's Thesis, Ohio State University, 1923.

<sup>5</sup> General Education Board. *Public Education in Indiana*. A Report to the Indiana Educational Commission, 1923, p. 43.

<sup>6</sup> Anderson, C. J., *The Status of Teachers in Wisconsin*, pp. 155-156. For a general survey of the problem of teaching conditions in the secondary schools see: Fitzpatrick, E. A., and Hutson, Percival, *The Scholarship of Teachers in Secondary Schools*, the Sachs Prize Essay of 1926.

<sup>7</sup> *The Scholarship of Teachers in Secondary Schools*, by Edward A. Fitzpatrick and Percival W. Hutson. Two Essays submitted for the Sachs Prize Essay of 1926. Macmillan Company, 1927.

of teachers who have taught three or more subjects ranges from 76 to 82, while 35 per cent to 45 per cent have taught five or more subjects. And these data seem to be fairly typical of the country as a whole!

To this description of a truly chaotic situation we might add the fact that supervising principals are usually specialists in but one or two subjects and yet are called upon to direct the teaching of all subjects in the curriculum. If they do not adopt the let-alone policy already described, it is not surprising that they tend to assure themselves that all is well in the realm of their jurisdiction by checking on the performance of their teachers through the use of such external devices as uniform lesson plans and teacher-rating scales. In recent years educational tests have served as convenient instruments for determining progress in academic subjects and for regulating the items of emphasis in teaching.

Theoretically speaking, it would seem to be an improvement to center supervision in the hands of heads of departments. Unfortunately, however, heads of departments are still luxuries which small schools cannot afford. Moreover, in large schools, it is not uncommon to find heads of departments who by virtue of their previous preparation are specialists in some one branch of their subject (such as chemistry or American history) and are ill equipped to supervise the teaching of other subjects within their general field (such as biology or ancient history). Frequently heads of departments are supervisors in name only, since they themselves are required to carry a teaching load which grants them no free time for supervision. Consequently, they too fall back upon a method of supervision similar to that followed by supervising principals.

It is true, of course, that the pains of growth are not peculiar to education. Business in its expansion has grappled with problems of rapid growth, heavy labor turnover,

and the necessity for utilizing employees without special training. And business in its early stages solved its labor difficulties by a hire-and-fire conception of foremanship. What is now spoken of as personnel management did not exist.

It was to be expected that the autocratic methods of handling employees which seemed to operate successfully in business should be taken over by school officials, and that supervisors should admire and practice the precept enunciated by one supervisor to the effect that he did his supervising when he hired his teachers. Such a point of view presupposes that the supply of teachers will exceed the demand and it looks to the improvement of instruction quite largely through the recruiting of a school staff from new and raw teaching material.

It is quite possible to grant the necessity and the inevitability of all of this in the past and still to question the wisdom of continuing a system of supervision which had its origin in conditions that may be termed "pre-professional."

In the first place, the autocratic method of supervision does not encourage the best teachers to remain in the profession. Just as in the business world, according to Gresham's law, inferior money drives out sound money from circulation, so will an educational organization that subjects good teachers to conditions which fail to stimulate initiative and independence and creative ability succeed only in driving from the profession of teaching those whom the gods have endowed. If one will ask the best teachers who are withdrawing from the schools today why they are leaving a work for which they are preëminently fitted both by natural inclination and training, he will become convinced that it is not low salaries alone which cause this exodus. The most skillful and capable teachers are restive under the rigid systems of supervision and control now domi-

nant.<sup>8</sup> They feel that they are hampered by courses of study which place a premium upon the acquisition of definite units of information in prescribed ways, within definite units of time, and without respect for the individuality of either teacher or pupils.

The practitioner of autocratic supervision, as we indicated above, is not entirely averse, however, to a heavy turnover in his teaching staff. He recognizes what is frequently true, that old teachers tend to secure a vested interest in their positions and to oppose innovations. In common with many who support legislation forbidding married women to teach in the schools, he tends to identify permanency of tenure with professional stagnation.

Permanency of tenure does lead to stagnation when the conditions of work snuff out individuality. On the other hand, when supervision is consciously directed toward the stimulation of originality, when new experiments in teaching are encouraged, when fellow teachers are brought together to work out the solution of common problems, to exchange ideas, and to appraise critically their procedures, and when opportunities exist for new ideas to penetrate a school system through the visitation of other schools, lectures, courses at colleges of education, and the like — in other words, *when the autocratic method is superseded by other methods*, permanency of tenure may well become one of the conditions for insuring healthy progress.

<sup>8</sup> "I shall never forget the quaint, gentle, wistful smile with which Angelo Patri waved his hand around the art room of his famous school Number 45, the Bronx, and apologized to me for the kind of drawing the children were doing. 'Here,' he said, showing me beautiful creative poster work of original kind on the walls of the room and in portfolios, 'is what the children had been doing until some busybody drew the attention of the school board to my departure from the routine methods of art teaching. Then I received directions to carry out the program as designated for the public schools of New York. Here it is,' he said with a sweep of his hand. 'PLASTER CASTS!'" Quoted from *The New Leaven*, by Stanwood Cobb. New York: John Day Co., 1928, p. 141.



A third objection to the autocratic method of supervision is an objection that may be registered against autocracy in any department of life. It militates against sincerity and honesty. The head that wears the crown is uneasy because it realizes it can seldom trust appearances. Outer conformity may hide disloyalty, and acquiescence in regulations is secured and maintained only while the eye of the superior is upon the situation.

Stories abound to illustrate this point. In one school system teachers are said to announce the presence of the supervisor by the simple device of "returning the book." Thus, a pupil will appear in Miss Brown's room with a book and will hand this to Miss Brown with the words, "Miss Jones has asked me to return this book to you." Immediately Miss Brown knows that the supervisor is on his round of visits and the work in her room takes on a character designed to satisfy the standards and idiosyncracies of her superior.

When teachers are well liked by pupils, this combination of dishonesty with conformity is often aided and abetted by the scholars, and the class, "rising to the occasion," seeks to place the teacher in the most favorable light possible. In short, concentration upon genuine learning is forgotten, frankness in human relations is abandoned, and the supervisor is thought of as a "snoop-o-visor."

A moment ago we pointed out that the autocratic method of supervision was taken over from methods followed in the business world. If this imitation was justifiable in the pioneer stages of education and business organization, there should be good reasons for substituting the more enlightened policy of progressive business management of today. In recent years personnel management in the larger and more responsible corporations has superseded the ancient methods of hire and fire. Psychologists are employed to administer tests which determine objectively the qualifications of

an employee for his job. Careful studies are made of conditions of work in order to do away with unnecessary fatigue and to discover the essentials which make for satisfaction in the performance of duties. Causes for discontent and maladjustment are investigated and ways are devised for arousing the interest of an employee in his work and encouraging the identification of himself with his job. The following quotation from an abstract of a paper read by Stella Engel, a psychologist for R. H. Macy and Company, New York, will confirm these statements:

In our study of cashiers, for example, we attempted to discover the existence and causes of fatigue problems. We found no evidence of such conditions but did find that our problem was that of employing cashiers' idle time. We have tried to meet this situation by a typing unit, which has been fairly successful to date, from the point of view both of the management and the cashiers.

In the case of dictaphone typists we found that a bonus system brought with it irregular production and fatigue. Here rest periods were established, a disliked supervisor was removed, and dictation improved. This unit appears to be well satisfied with the new arrangement and is more productive.

Our tentative plan for making studies of work factors may be considered under four main groups: I—General physical condition; II—Supervision; III—The job itself; and IV—The worker. We are convinced that only by a thorough routine survey of general factors in a department situation can we hope to make any single discovery yield its full value. To solve the problem found in jobs and their effects on workers, we must take into account every possibility which touches in the least degree on the individual's chances for success and satisfaction in the job.<sup>9</sup>

It is impossible, statistically speaking, to indicate the extent of the autocratic attitude in supervision. In actual practice it is probably true that a given supervisor combines autocracy with other methods and attitudes. In recent

<sup>9</sup> Quoted from *Mental Hygiene Bulletin*, May, 1928.

years the autocratic method has become much like the wolf in the nursery tale who undertook to eat up the seven little kids left at home by the mother goat. The mother had warned the kids to let no one enter the house while she was away. Consequently, when the wolf knocked at the door and announced in a wolf's voice that he was the mother, he was refused admission. So also was he denied admission when he had softened his voice with magic chalk but still exposed his wolf's paw. But when he succeeded both in disguising his voice and in covering his paws with dough, he obtained admission and devoured his victims.

So today. Few supervisors are announcing an allegiance to an autocratic method of supervisor-teacher relationship. They signify rather their loyalty to scientific supervision and are emphasizing the need for an objective appraisal of teaching results to replace subjective opinion. In succeeding chapters we shall inquire whether objective supervision is anything more than autocracy with its voice softened by chalk and its paws covered with dough.

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## CHAPTER III

### SCIENTIFIC AND OBJECTIVE SUPERVISION

The decade 1890-1900 marks roughly the beginnings of Herbartian contributions to American education. At this time a group of young and vigorous pioneers in educational theory and practice set out to transform the character of American education. Many of them had studied in Germany. All had come under the influence of Herbartian ideas. In 1895 they founded the American Herbart Society, which, with a change in name,<sup>1</sup> has continued to serve both as an open forum for educational discussions and as a coördinating agency for research and experiment in education. These pioneers, however, were not content merely to plant old seed in new soil; and although they identified themselves with certain trends in Herbartian pedagogy, they by no means committed themselves exclusively to an orthodox application of Herbartian doctrine. They conceived of Herbartianism as a body of fruitful and suggestive hypotheses that merited investigation and experiment rather than as dogmas to be applied uncritically.

This attitude of intelligent consideration, investigation, and experimentation on the part of the founders of the National Herbart Society probably accounts for the fact that Herbart may be recognized as one source of two opposed tendencies in contemporary education: the one which emphasizes the importance of interest, the significance of child initiative, originality, spontaneity, and the creative possi-

<sup>1</sup> In 1902 this became the National Society for the Scientific Study of Education and is at present called the National Society for the Study of Education.

bilities resident within the child, and the other which places supreme reliance upon science and the standardization that so commonly flows out of science. Herbart surely experienced no sense of contradiction when he stressed the importance of interest in education and aspired likewise to make of education a science through the utilization of a psychology that, in his words, derived from a study of the "statics and mechanics of the mind." The contradiction, if it be a contradiction, is a contradiction in practice.

It is not our purpose to seek here an explanation for the conflict in contemporary education between freedom and interest on the one hand and science on the other. We merely wish to call attention to the fact that in large measure it is to Herbart that we are indebted for a deliberate attempt in education, first, to organize materials and methods of learning with reference to what can be discovered regarding the interests of children and, second, to make of education a science.

It is primarily with certain influences of science upon supervision that we are concerned in this chapter.

That the applications of science to education should profoundly influence supervision is, of course, clear. The supervisor is directly concerned with all that affects the organization of subject matter and methods of teaching — two fields in which science has introduced revolutionary changes.

Take, for example, the criterion used in the selection of subject matter. Since the function of the secondary school in all ages has been chiefly to conserve and to hand on to a selected group the cultural traditions of the race, the subjects taught therein have been less vulnerable to attack than have subjects in the elementary school. Moreover, the pedagogue has long guarded secondary-school subjects from invasion with a two-edged sword. The educational experiences to which pupils are subjected have been defended

either because of their training value for a future life activity or because of their direct use in adult life. By turning now one and now the other edge toward the critics of secondary education, the schoolmaster has warded off quite successfully attempts to test immediately the usefulness of what he has taught.

Science in the guise of educational psychology has dulled of late the edge of both contentions. By its insistence upon definitions, and by devising methods of testing and measuring the values of subjects, it has at last cast a mantle of doubt over the magical properties formerly thought to be inherent in conventional subject matter, and educators are now put to the necessity of finding subject matter more appropriate to the needs of adolescents than are traditional materials.

The new emphasis in the selection and organization of subject matter for secondary education received definite formulation in 1918 with the report of the National Commission on the Reorganization of Secondary Education. This Commission stated the functions of the secondary school in the form of Cardinal Principles. Its preliminary statement reads:

In order to determine the main objectives that should guide education in a democracy, it is necessary to analyze the activities of the individual. Normally he is a member of a family, of a vocational group, and of various civic groups, and by virtue of these relationships he is called upon to engage in activities that enrich family life, to render important vocational services to his fellows, and to promote the common welfare.<sup>2</sup>

Then followed its formulation of the fundamental principles which should guide the reorganization of subjects and curricula. These principles, as is well known, are health, command of fundamental processes, worthy home member-

<sup>2</sup> Bureau of Education, Bulletin, 1918, No. 35.

ship, vocation, citizenship, worthy use of leisure, and ethical character.

The insistence of the Commission upon organizing secondary education with reference to the needs of actual living has stimulated an effort to organize subjects of study in terms of "scientifically determined specific objectives." Offhand this would seem to be a healthy appeal to fact; and so it might well be when broadly viewed and intelligently carried out. Not infrequently, however, it has tended to deflect attention from the child's real needs. Various methods have been resorted to in order to determine the specific objectives of teaching. One method is to question teachers regarding the abilities or traits they think it essential a child should acquire. Another is to search through contemporary magazines for references to the subject being organized in order to determine quantitatively the relative value of the items of information pupils are to digest. In one case the appropriate material for a course in physics was determined by asking the parents of pupils what applications of the facts and principles of physics they had made in their daily lives. Whatever the method followed, the general tendency has been to emphasize subject matter that pertains chiefly to adult life rather than to the life of the adolescent, and to accept the *status quo*, the existing state of adult culture, as the criterion for determining what the adult of tomorrow should know.

Consequently, it must be admitted that the contributions of science to the organization of the curriculum and courses of study are still mainly negative in their results. The determination to formulate clearly the objectives in education that subject matter shall seek to realize has enabled teachers and supervisors to eliminate much from traditional materials of learning. It has been more difficult to select adequately appropriate new materials. Nevertheless, the authority of scientific method is gaining recogni-



tion and supervisors are increasingly impressed with the importance of utilizing science in determining the relevancy of subject matter to the aims of secondary education.<sup>3</sup>

Science has probably thus far influenced teaching method more significantly than it has subject matter. This influence upon method it has exercised to a large extent through revealing the importance and the extent of individual differences. In his monumental work on *Psychology*, William James called attention to the fact that until about 1863 psychologists operated quite largely upon the assumption that all minds are alike. The concept of a typical mind quite naturally encourages uniformity of learning materials and lock-step methods of teaching. When, however, the Herbartians insisted that "mind" is no more than a collective noun, a name for the peculiar assortment of ideas which the individual acquires in the course of his experience, emphasis in teaching shifted from subject matter in general and procedure in general to the specific ideas a child possesses and the ways in which he comes to acquire these ideas.

It is no accident, therefore, that shortly after 1890 Thorndike and others began to reveal how widely children vary in their rates of learning and in their learning abilities. And it is also understandable why in the course of the last thirty years educational literature has featured such methods of teaching as individual instruction, supervised study, the socialized recitation, the project method, and so forth, which take their departure from an emphasis upon individual differences in pupils with respect to interests and abilities.

<sup>3</sup> For an illuminating discussion of techniques employed in the selection of instructional materials, see: Williams, L. A., *The Making of High School Curricula*, pp. 90-178. The work of Stephens College, Columbia, Missouri, in constructing orientation courses, under the direction of W. W. Charters and a former Dean J. J. Oppenheimer, is also worthy of special attention in this connection.

The importance of this concentration upon individual differences in educational procedure can hardly be over-emphasized. Perhaps it is still too early for us to appreciate adequately its full significance. As we have indicated, it affected the supervisor's function first and most conspicuously in its bearing upon teaching procedure. Then came tests of intelligence and the application of their findings to such matters as homogeneous sectioning and the enrichment of courses of study for capable students. But the scientific study of learning, and particularly the causes for learning difficulties, has continued to direct attention to the intricate and complex character of child nature. Problem children,<sup>4</sup> for example, are frequently encouraged to become behavior problems out of school because of learning difficulties within school and, conversely, learning problems in school commonly may arise from maladjustments in the home and community environments. Thus, the revelation of the intricate character of human nature continues and the professional possibilities in the pupil-teacher and the supervisor-teacher-pupil relationship become more and more alluring.

Were this not a passing reference to the contributions of scientific method to supervisory procedure, we should dwell further upon the transformation which scientific investigation has brought about in the understanding of child behavior. In secondary education particularly, since this concerns itself with the period of adolescence, science has eradicated huge quantities of sweeping generalization and vague formulæ. Here it was less than a generation ago that the biological doctrine of recapitulation, known in education as the "culture-epoch theory," was growing most rampantly and was most decisively influencing the character and the content of education. The rapid spread of the junior-high-school idea, for example, was probably due to

<sup>4</sup> Cf. Chapter XVII.

no small extent to the influence of those educators who grounded their arguments upon the distinctive and unique characteristics of adolescence. Today, however, scientific analysis is dispelling many of the early generalizations regarding adolescence, and child guidance clinics are substituting individual case histories as a basis for understanding and dealing with adolescent boys and girls.<sup>6</sup>

The wider science extends its studies, and the more successful it becomes in formulating its conclusions for general practice, the more it stresses the uniqueness of the individual. Intelligence tests, for example, function at their best as general instruments for revealing the inventory of abilities and disabilities possessed by the child under examination; and hence they enable the teacher to act more intelligently than formerly as a guide in his education. The general conclusions of the investigators in mental hygiene, again, assist the teacher and the parent to deal more sympathetically and understandingly with the boy or girl than did the traditional school and home. Science in its objective and impersonal search for truth has thus assisted the educator to appreciate intimately and to deal more humanely with the pupils under his charge. Shall we not say then that the peculiar contribution of science to education has been to enhance the significance of the individual?

An unqualified affirmative answer to this question would neglect an influential movement in contemporary supervisory practice. Science may indeed be used to discover common and suggestive factors which will yield an understanding and a control over individual behavior. It is thus in medical practice, where efforts are being made at present to record all the symptoms and characteristics of patients who suffer from cancer, in the hope that thereby information may be secured for devising successful methods in the treatment and cure of cancer. But science may also

<sup>6</sup> See references at end of chapter.

be used otherwise. A practitioner of education, for example, may become impressed with the common elements in a group of cases and seek to use these common elements as standards for future achievement.

Many investigations in education have had standardization as their major objective. In some cases students of education will observe carefully the performances of good teachers and accept as worthy of general adoption the activities and the characteristics common to all. Again, the teaching of a subject may be analyzed into its various time activities as a basis for deriving acceptable standards. Thus, Brueckner concentrated upon ascertaining the amount of time the teachers of Minneapolis devoted to various types of reading activities in the primary grades with a view to determining a standard for each phase of reading.

An incidental advantage of the activity analysis, from a scientific supervisor's point of view, consists in the fact that he thereby secures a check upon activities which take place in his absence. As Brueckner writes in this connection regarding reading activities:

At present it is not known just how much time should be given to each of the activities during the week. A principal may see excellent work of one type being done by a teacher. Under usual conditions, the principal is not able to spend an adequate amount of time with a teacher on several succeeding days to evaluate the work done each day. An objective time analysis such as is afforded by the method here suggested enables a principal to study the class work for a period of time from one point of view. This analysis makes it possible to discuss with a teacher the record of work which she has kept herself and raises it above the plane of possible personal bias. Comparisons of the time records of different teachers can be made and discussed at teachers' meetings with most beneficial results. General policies regarding the nature of instruction can be determined. Time analyses of the methods used by the teachers who are securing the best results may suggest changes that can be made where the results are apparently not as satisfactory.

A concrete demonstration of the value of this work is revealed by the data in Table I, which is a summary of the average results

TABLE I  
AVERAGE NUMBER OF MINUTES A WEEK DEVOTED TO VARIOUS  
READING ACTIVITIES IN GRADES I TO IV IN SEVEN MINNEAPOLIS  
SCHOOLS

TYPE OF ACTIVITY	GRADE			
	I	II	III	IV
1. Pure phonetic drill to develop independence in word recognition . . . . .	63	62	19	2
2. Word drills connected with daily reading work for meaning and pronunciation.	34	51	30	30
3. Oral reading: books, blackboards, cards, etc. . . . .	112	45	43	34
4. Flash-card drills to develop silent-reading ability . . . . .	28	6	17	32
5. Directed silent reading . . . . .	62	118	83	109
6. Combination of oral and silent reading . . . . .	20	35	32	24
7. Undirected free silent reading . . . . .	66	58	41	10
8. Illustration and handwork . . . . .	69	32	27	13
9. Dramatization . . . . .	16	12	26	18
10. Oral language based on reading lesson during reading period . . . . .	40	10	22	23
11. Written language work based on reading lesson during reading period . . . . .	0	15	56	10
12. Use of arithmetic, geography, etc., material during reading period . . . . .	12	0	1	16
13. Attention to needs of individual pupils.	35	36	45	21
14. Tests, formal and informal . . . . .	15	5	12	8
15. Other . . . . .	..	..	..	..
Total . . . . .	572	485	454	350

found in a time-activity analysis of reading made by the teachers in Grades I to IV in seven Minneapolis schools for one week.<sup>6</sup>

<sup>6</sup>Quoted from Barr and Burton, *The Supervision of Instruction*, pp. 595-596. D. Appleton and Co. For accounts of activity analysis techniques,

This utilization of common characteristics — be they activities, or common standards of attainment as revealed by widely applied tests, or the most common procedures followed by successful students in certain learning operations and the like — for the purpose of securing uniform teaching performance is frequently termed “scientific,” or “objective,” supervision.

A typical method of administering objective supervision is illustrated in an article by F. B. Knight on “Possibilities of Objective Technique in Supervision.”<sup>7</sup> Knight has analyzed arithmetic teaching into a “kit of tools” which constitute a series of supervisory procedures. The kit described in this article contains some eight different tools. In their use “it is assumed that the supervisor has previously mastered the system and has become expert in the use of his tools. Such previous preparation will take about fifty hours of intensive study.”<sup>8</sup>

Tool 1 consists of a series of mixed drills in the fundamental operations. These are to be administered by the classroom teacher once a week according to a set of specifications afforded by the supervisor. “Genuine standards for these drills are highly important to the supervisor.” Having administered the test, the teacher proceeds with Tool 2, a diagnostic record of pupils’ performances. “The main facts of the weekly inventory should be sent to the supervisor” (thus constituting Tool 3), who thereupon transcribes the data upon a permanent record, thus completing Tool 4. The supervisor is now ready for Tool 5, or “the supervisor’s weekly suggestion blank.” “If Mary Smith, a pupil in Grade V, has been reported for three

see: “Scientific Method in Supervision,” *The Second Year Book*, National Conference of Supervisors and Directors of Instruction, Bureau of Publications, Teachers College, Columbia University, 1929.

<sup>7</sup> *Journal of Educational Research*, XVI (June, 1927), pp. 1-15.

<sup>8</sup> *Ibid.*, p. 14.

consecutive weeks for low ratings on her inventory drills, the supervisor may give directions for the diagnosis of her difficulties and remedial work can be started. When a teacher's weekly report shows that addition of fractions will soon be finished, the supervisor should make sure that this skill is properly mastered before the teacher goes on to the subtraction of fractions. This is the time to visit and to test to make sure that that 'block' of the course of study is well done. It is for the supervisor to say whether or not the class is to go on."<sup>9</sup>

Tool 6 consists of diagnostic tests in the various divisions of a subject, and "Remedial Units" make up Tool 7. With respect to remedial work Knight states:

A doctor in treating a patient uses medicine already made. He does not take time to manufacture it on the spot. . . . Scientific tabulation and analysis of errors in arithmetic show that a vast majority of them fall into certain well-defined types; in fact they can be predicted with some degree of certainty. This being the case, adequate remedial units can be made ahead of time.<sup>10</sup>

Knight names the textbook, properly edited by the supervisor, as Tool 8. "Such types of supervision," he adds, "complex and confusing as they appear in compact discussion, are as a matter of fact simple, clean cut, and labor saving."<sup>11</sup>

The dominant characteristics of this type of objective and scientific supervision are clear. The initiative for directing both teacher and pupil activity rests squarely in the hands of the supervisor. As Knight puts it, "It is for the supervisor to say whether or not the class is to go on." The formulation of standards of attainment, the analysis and treatment of learning difficulties, be they group or individual, are meticulously directed by the

<sup>9</sup> *Journal of Educational Research*, XVI (June, 1927), p. 9.

<sup>10</sup> *Ibid.*, pp. 10-11.

<sup>11</sup> *Ibid.*, p. 15.

supervisor. It is for him and not the teachers "to reason why." A second characteristic of this method of supervision is its provision for absentee direction of teacher activity. It is a technique designed to acquaint the supervisor with the results of teaching which are secured in his absence from the classroom.

Not all scientific supervisors, however, are willing to abandon detailed classroom supervision as the chief instrument for the improvement of teaching. Thus, Professor H. W. Nutt in his book on *Current Problems in the Supervision of Instruction*<sup>12</sup> describes a method of "Objective Supervision" which centers rather exclusively upon the direct observation of a teacher's performance.

In the book referred to, Professor Nutt first investigates the actual conditions of supervision in representative school systems and concludes upon the basis of his careful study that in general supervisors have too much ground to cover and too many teachers to supervise. This limits severely both the quantity and the quality of their work. He finds further that supervision is still dominantly inspectorial in character rather than helpful in the sense of assisting teachers to meet the actual problems of teaching. Professor Nutt also concludes that when supervisors do succeed in observing rather carefully the work of teachers and in discussing with them their teaching difficulties, the teachers are unable to face their problems in an impersonal manner. "The noting of good and bad points in the light of pedagogical theories of good teaching," he states, "seemed to engender self-consciousness on the part of the teacher and to make her feel that supervision was largely a matter of destructive criticism."<sup>13</sup> The author is thus prompted to believe "that one of the most pressing needs of supervision is the establishment of simple, direct, objective

<sup>12</sup> Published by Johnson Publishing Co., 1928.

<sup>13</sup> Nutt, H. W., *op. cit.*, p. 280.



means in studying the work of teachers and in helping teachers to study their own teaching difficulties."<sup>14</sup>

The plan inaugurated by Professor Nutt provides for radically increasing the number of classroom visits on the part of the supervisor and securing on his part a complete account of what goes on. The supervisor visits for the entire class period and records detailed observations on the teacher's procedure and the reactions of the pupils. Professor Nutt recommends that these notes be taken in double column, the first to indicate the activity of the teacher and the second the reactions of the pupils. These notes are, moreover, to be made in duplicate, so that a copy may be handed the teacher to be used as a basis for study and conference. In some cases the data thus secured are analyzed by the supervisor and teacher together. At other times the teacher is given the record at the end of the class period and is asked to analyze the situation before he confers with the supervisor. Finally, "the observation data, the analysis made by the teacher, and a brief record of the conferences" are filed for future reference.

The following data on a high-school class illustrate in detail the operations described above.

## OBSERVATIONS

10th Grade History

October 20

## WRITTEN TEST ON MAGNA CARTA

18 Pupils

Time — 8 minutes

Procedure

Results

T: Our past work has concerned England and France. Our work now will concern Wales and Scotland.

What do we know about the relationship of England and Wales? Scotland? (Two pupils answer.)

Attention good.

<sup>14</sup> Nutt, H. W., *loc. cit.*, p. 280.

## Procedure

## Results

T: What do we know of the relation of England and France? (Roy answers.)

T: What is the relationship of England (Edward I) and Wales? (Clarence and Erma answer.)

T: Why should England want to conquer Wales? (Helen answers.) Was there anything else? (Roy answers and teacher explains.)

T: Who were the bards in Wales? Do you remember singers in any other part of Europe? (Eileen and Helen answer.)

T: Do you think these bards had any effect in Wales? (Erma answers.)

T: Alice, who are bards?

Check question shows pupils did not understand.

T: What was the origin of the term, Prince of Wales? (Harry told who Prince was.) Mary, tell us what you know of it.

T: Was England successful in her conquest of Wales? Homer? (Teacher explains.)

T: What kind of country was Scotland? (Daisy answers.) What do you think of when you think of Scotland today? (Harold answers.) What kind of country? (Alice answers.) Any difference in Scotland itself? (Faun answers and teacher explains.)

T: What reason did England have for making war on Scotland? (Aaron, Clarence, Helen answer.)

T: Now tell us what reasons England had for making war? Mary?

T: What effect might Scotch-French alliance have on England? Aaron?

Several volunteer.

Procedure	Results
T: Is there anything that comes later that may affect it? (Explains.)	
T: How did attacks made by kings end? What success did kings have in Scotland? Everett? Faun? Erma?	Close attention.
T: Do you remember stories of Robert Bruce? (Daisy and Harry J. tell stories and teacher supplements.)	
T: Do you believe the Scotch and English would get along well? Roy?	
T: Is there anything that might lead to trouble between England and France? Everett? Wallace? Helen?	
T: What happenings brought about the Hundred Years' War? Eileen? Norton?	
T: What relation would John be to the French king? Homer?	Attention good.
T: What country had been successful in this war? Harold? Harry?	
T: What makes you think the English are successful? Roy?	
T: What changes did that make in France? (Faun answers and teacher explains at length.)	
T: What changed in France? Faun? Erma? (Pupils open books and Erma reads.) What change has come about? (Erma answers and teacher explains.) What is the Estates General? Eileen?	
Assignment:	
Black Death — What effect it had.	
Joan of Arc — How she helped.	
War of Roses — Why?	
What would make countries stronger?	
Finish discussion of Middle Ages.	
Papers of previous quiz to be given back.	

## ANALYSIS

1. The first outstanding teaching problem exhibited in these data is that of organization of historical facts to present a definite unit of content. The teacher did not start with a clearly defined problem which the pupils were to think out by means of the facts which were given in answer to the many little questions asked by the teacher. The short developmental questions, such as "Why should England want to conquer Wales?" were not distributed in relation to factual questions in such a way as to lead to the building up of syntheses. The very absence of summaries is a fairly clear indication that the teacher had not consciously thought out what the content of thought for the pupils should be as a result of dealing with the facts under consideration.

2. Another point that stands out prominently is that too much material had been assigned for the period. The attempt to cover the ground led to topical discussion of facts which were extracted by small questions for the most part. This difficulty is related to the one just given above. The teacher had no content unit of organization in mind to guide in assigning the material to be studied.

3. A third problem presented here is that of the assignment for the next period or recitation. It is quite clear that too much material was assigned for effective study. Moreover, there is no large unifying question or problem the analysis of which would lead to the thinking out of smaller questions and thus develop an understanding of the significance of the historical facts presented. The instructions are too brief and indefinite to serve as a guide to effective study.

4. Another difficulty or problem was that the teacher did too much of the talking. She not only asked too many questions but she made too many explanations of points that should have been developed by the right kind of study on the part of the pupils. This tendency on the part of the teacher was fostered by the failure to meet the first three problems given above.

5. A further problem was that of securing the pupils' attention and interest. The observation data show that, in the main, the

pupils were attentive and seemed for the most part to be interested in the discussions. The problem, however, is that of securing a productive result through good attention and interest. The pupils may be attentive to questions that do not lead to worthwhile results in their thinking. The asking of many questions is one way of stimulating mental alertness and thus securing attention, but it is not as productive as fewer well-organized problem questions would be.<sup>15</sup>

In his desire to perfect the existing system of supervision, Professor Nutt is not content merely to indicate the way in which an individual supervisor may make his work objective. He carries the same technique over into the relations between the various supervisors in a complex school system. He infers quite logically that if it is a good thing for a teacher to be supervised objectively by a supervisor, it should be equally beneficial for a supervisor to be supervised objectively by his superior. Moreover, as he sees it, a superintendent can function effectively only when he deals directly with both teaching and supervisory situations. As Nutt puts it, "in order to do constructive work, he must see the same teaching situation that is observed by the assistant superintendent, the principal, and the vice principal." It is therefore necessary to devise a method that will bring all stages of the supervisory process under the superintendent's eye. Consequently, under an ideal system of supervision we should have on occasion a classroom teacher visited by a vice-principal, a principal, an assistant superintendent, and a superintendent. The recitation begins. Each official takes note of the situation with reference to the special function he is elected to perform. The hour proceeds. The class ends and the vice-principal promptly hands to the teacher the supervisory record of what occurred. On this occasion we shall suppose that the gods in their generosity and compassion have

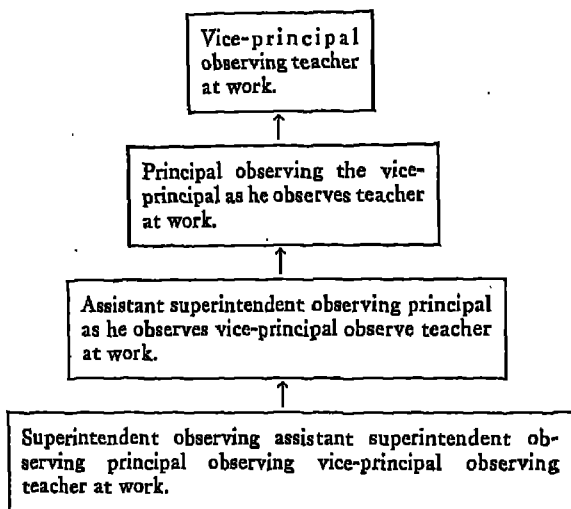
<sup>15</sup> Nutt, H. W., *loc. cit.*, pp. 325-330.

granted to the teacher, before his conference with the vice-principal, an opportunity to study and analyze the observation record in the privacy of his room. Shortly, however, he is called upon to confer with the vice-principal.

At this stage, the vice-principal comes under the special supervisory observation of the principal. This conference over, the principal confers with the vice-principal in the presence of the assistant superintendent. Then follows the conference between the assistant superintendent and the principal, regarding the latter's conference with the vice-principal over the vice-principal's conference with the teacher!

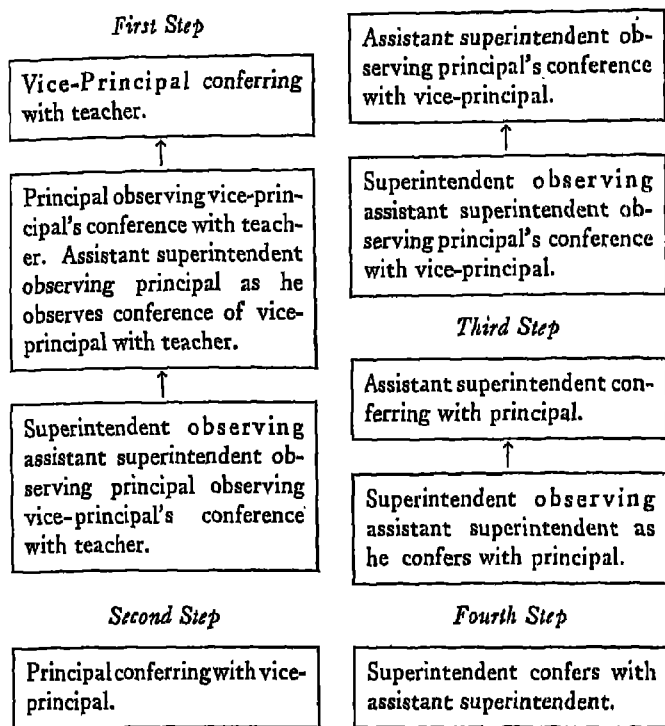
We reproduce below the diagrams which Professor Nutt uses to illustrate the sequence of conference contacts essential in making a supervisory organization function.

DIAGRAM SHOWING SEQUENCE OF VISITATION CONTACTS.<sup>10</sup>



<sup>10</sup> Nutt, H. W., *loc. cit.*, p. 272.

## DIAGRAM SHOWING SEQUENCE OF CONFERENCE CONTACTS



In defense of his program Professor Nutt writes:

The superintendent with this perspective of the complete supervisory situation is able to make constructive suggestions to the assistant superintendent as to how to give constructive suggestions to the principal, as to how to give constructive suggestions to the vice-principal, as to how to give constructive suggestions to the teacher. . . . In this way he makes a limited number of visits count heavily in the improvement of teaching; in the improvement of supervision; in the improvement of supervision of super-

vision; in the improvement of the supervision of supervision of supervision.<sup>17</sup>

In the following chapters we shall find occasions to refer briefly to the methods of objective supervision advocated by Knight and by Nutt.

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<sup>17</sup> Nutt, H. W., *loc. cit.*, pp. 273-274.



## CHAPTER IV

### SOME MISTAKES IN THE APPLICATION OF SCIENCE TO EDUCATION

The educator who wishes to apply critically the findings of science will have occasion to remind himself frequently that science is an instrument forged to realize educational aims and that scientific conclusions appropriate to one set of conditions are frequently inapplicable or invalid under other circumstances.

Suppose, for example, that a high school committed to mass instruction has decided for purposes of economy to maintain large class sections and to insist upon a teaching load of no fewer than six class periods per day. This condition can be made tolerable and perhaps even effective if scientific studies are resorted to for discovering devices which teachers can use and the qualities teachers must possess in order to handle large groups successfully. Thus, one of our most distinguished educational scientists writes:

A teacher who can reach each individual in a class of forty is a more valuable teacher than one who may be able to do this to an equal degree but who cannot do it for more than twenty-five children. Moreover, there is another aspect of this question of size of class. If a teacher's showing in some particular is not as good as the average nor not as good as someone's else, it may be because she has an oversized class.<sup>1</sup>

The scientific study of the results secured in teaching large and small class sections usually presupposes group

<sup>1</sup> Buckingham, B. R., "Visiting the Classroom," *Educational Research Bulletin*, Ohio State University, VIII (May 1, 1929), p. 188.

instruction with uniform assignments under active teacher direction. These investigations will doubtless isolate in time those factors making for success or failure under these conditions, but they will not settle the question as to whether or not boys and girls should be thus educated. Before a supervisor decides to utilize the findings of science, therefore, he will want to come to terms with the more fundamental question, "What educational values *do we wish teaching situations to produce?*"<sup>1</sup>

John Dewey has pointed out the relative value of scientific method in his plea that progressive schools center upon

<sup>1</sup> The following extract from an editorial by W. W. Charters on large and small classes is quite appropriate in this connection:

"Within the last ten years a great number of objectively controlled experiments have demonstrated the fact that, according to the tests administered in the experiments, the size of a class is a matter of little importance. Classes numbering fifty, and in some cases as high as one hundred and seventy students, have an average score as high as those containing only twenty-five or thirty members. These objective data are being used in a rapidly increasing number of cases by administrators concerned with the pupil-cost of instruction to increase the size of classes.

"Thoughtful critics do not accept the data at their face values. They attack the findings from two sides. They claim, in the first place, that the objective tests which have been given directly test little except information. They open the whole question of the outcomes of teaching. They say that education develops the ability to think and reason more closely. They assert that it teaches and influences behavior, and they claim that it does something to change points of view toward life and attitudes toward values and objectives. These outcomes, they believe, are not tested in any valid degree by the measures which have been used in reaching the conclusions concerning the importance of class size. They claim, also, that there is something to be gained from direct personal contacts. They recognize, of course, that there may be little more personal contact between instructors and pupils in small classes than in large groups; but they claim that it would be impossible for those teachers who do make much of personal contacts to understand and know their students well if the classes are extremely large.

"In the opinion of the writer, the objections of these thoughtful critics should be taken seriously by administrators before they accept the findings in favor of large classes as a basis for wholesale increase in the teaching load."

— Quoted from *Educational Research Bulletin*, Ohio State University, VIII, No. 12 (September 11, 1929), p. 276.

the problem of making available to education generally the scientific outcomes of progressive methods. Thus, he writes:

The place of measurements of achievements as a theory of education is very different in a static educational system from what it is in one which is dynamic, or in which the ongoing process of growing is the important thing.

The same principle applies to the attempt to determine objectives and select subject matter of studies by wide collection and accurate measurement of data. If we are satisfied upon the whole with the aims and processes of existing society, this method is appropriate. If you want schools to perpetuate the present order, with at most an elimination of waste and with such additions as enable it to do better what it is already doing, then one type of intellectual method or "science" is indicated. But if one conceives that a social order different in quality and direction from the present is desirable and that schools should strive to educate with social change in view by producing individuals not complacent about what already exists, and equipped with desires and abilities to assist in transforming it, quite a different method and content is indicated for educational science.<sup>3</sup>

Science can, of course, do more than indicate the more economical of two possible lines of procedure. It can predict educational outcomes with a high degree of accuracy. Take, for example, the application of intelligence tests to freshmen entering college. These tests have undergone steady refinement in the direction of accurate forecast.

Thus, the Ohio College Association, working largely under the direction of Professor Herbert A. Toops of Ohio State University, has accumulated data which can be used safely in advising candidates who seek admission to these colleges.<sup>4</sup> The Association has accumulated for some years

<sup>3</sup> Address made at Eighth Annual Conference of Progressive Education Association, March 8, 1928. Published by Progressive Education Association, Washington, D. C.

<sup>4</sup> *A Suggested Program of Pre-College Guidance for High Schools*. Columbus, Ohio: The Ohio State University Press, 1929.

data which reveal the success and failure of students in college who secure a given percentile score on the Ohio College Association Intelligence Test. These results are evident from an examination of the following table:

TABLE I  
THE SIGNIFICANCE OF THE OHIO COLLEGE ASSOCIATION INTELLIGENCE TEST PERCENTILE<sup>5</sup>

INTELLIGENCE TEST RATING (PERCENTILE)	PER CENT OF SUCH STUDENTS WHO ULTIMATELY	
	Do at least one year of at least minimally satis- factory work at Ohio State University	Do at least two years of at least minimally satisfactory work at Ohio State University
100 (Highest)	73.4	61.2
90	70.7	64.2
80	69.4	60.2
70	67.9	58.0
60	55.3	49.0
50 (Average)	47.9	39.5
40	46.5	38.0
30	43.2	33.5
20	39.1	37.0
10	37.5	34.5
1 (Lowest)*	(20.0)	(15.0)

\* Estimated.

As stated in *A Suggested Program of Pre-College Guidance for High Schools*, issued by Ohio State University:

It will be noted at once that for the low-scoring students the chances for doing acceptable college work are very poor. Barely a third of even those in the 10 percentile group will have completed their second year as "successful sophomores." . . . Such figures,

<sup>5</sup> Herbert A. Toops, *op. cit.*, p. 12.

for example, presage almost certain failure for students making the lowest 20 percentile scores.<sup>6</sup>

When to this information regarding the percentile score of a student is added data regarding his elementary- and high-school record, his age, and the number of failures in high school, its predictive value is enhanced.

But what makes possible accuracy of prediction? The answer lies in the skillful analysis psychologists have made of the characteristics of college teaching. Under the present lecture-note-taking-assigned-reading system certain skills become indispensable tools for a student's success. The most skillful intelligence testers have abandoned the effort to test "raw brain power" and have concentrated instead upon sampling and measuring the student's present equipment of working tools. Consequently, these tests are of value only under prevailing conditions of college teaching. A different conception of what college is for, or the assumption of new responsibility on the part of colleges and secondary schools, or an emphasis upon more varied factors in growth would render these scientific findings of less than their present value.

For example, Dr. Luella C. Pressey reports an experiment<sup>7</sup> which she conducted with a group of students who had been placed on probation at Ohio State University because of unsuccessful academic work. According to their percentile scores on intelligence tests, as well as their academic records, these students were doomed inevitably for dismissal from the University. Dr. Pressey, however, devised a plan of remedial instruction designed to fill gaps in their past preparation and to correct faulty methods of study, with the result that twenty-six out of thirty-one of

<sup>6</sup> *Ibid.*, p. 13.

<sup>7</sup> *Research Adventures in University Teaching*. Bloomington, Illinois: Public School Publishing Co., 1927, pp. 11-21.

these students succeeded eventually in restoring themselves to good standing in the University.

In this case the predictive value of science was interfered with. It was interfered with because the test records of the students served as a challenge for an adventure in teaching which differed from the conventional procedure that colleges commonly adopt with delinquent students.

It is well to bear in mind that in applying scientific tools, such as intelligence tests, subject-matter tests, techniques for organizing courses of study, schemes for rating teachers and pupils, and the like, and the dictums of science generally, that science is a tool and a tool only; that it always presupposes a standard of reference. Accordingly, how we shall use science must vary with the educational purposes we hold before us. Science is an instrument, not a way of life. It follows, therefore, that in this use of science we must constantly ask ourselves: Does this scientific tool serve the best educational ends? Is it more than making the best of a bad situation? Does it tend to perpetuate the *status quo*? Are the standards which it presupposes valid standards? What educational goals does it take for granted?

It is peculiarly important to remember the relative character of scientific conclusions when utilizing the results of studies that represent a consensus or group findings. Many applications of "scientifically established facts," for example, illustrate what one might call "the fallacy of the average." Thus, extensive studies may be made in which two or more methods of teaching procedure are compared. If one of these methods clearly establishes its superiority over the others, it is commonly concluded that it can be applied with profit to the teaching of all children, on the false assumption that what is true of groups will hold true of an individual child.

Dr. Samuel T. Orton's brilliant work with children suffering from reading disabilities clearly reveals the danger in

this assumption. Dr. Orton finds that methods of teaching reading which are unquestionably the best methods to follow with the majority of children are the methods calculated to create difficulties and to develop habits that impede progress for those children who do not establish readily and early in their reading experience the physiological habit of using exclusively the images of one hemisphere and ignoring those of the other. These children are confused and discouraged because of the tendency to alternate right-left and left-right direction in reading; and unless their divergence from the group is noted when they first begin to read and unless they are taught by methods peculiar to their own needs, they become serious academic problems, deficient in reading, writing, and spelling, and in all subjects that involve intimately these fundamental tools.<sup>8</sup>

What Dr. Orton thus establishes as regards learning to read applies to other fields. It is never safe to generalize from groups to the individual. And yet how much of our educational practice is guilty of this fallacy!

One of the contributions of science to education, to which the historian of science can quite properly "point with pride," is its disintegrating influence upon the dogmatic attitude. Science is loyal to the pursuit of truth, but its constancy to a particular truth never rises above the status of a trial marriage.

This faithful adherence of science to truth with a capital T as against its tentative acceptance of a particular truth

<sup>8</sup> Samuel T. Orton, "Neurological Studies of Some Educational Deviates from Iowa Schools," *Journal of Iowa State Medical Society*, April, 1929.

—, "A Physiological Theory of Reading Disability and Stuttering in Children," *New England Journal of Medicine*, November, 1928.

—, "The Neurologic Basis of Elementary Education," *Archives of Neurology and Psychiatry*, March, 1929.

—, *Specific Reading Disability—Strephosymbolia*, American Medical Association, April, 1928.

—, "'Word-Blindness' in School Children," *Archives of Neurology and Psychiatry*, November, 1925.

was admirably stated by John Locke more than two hundred years ago. Thus, he wrote in his *Conduct of the Understanding*:

The world is apt to cast great blame on those who have an indifferency for opinions, especially in religion. I fear this is the foundation of great error and worse consequences. To be indifferent which of two opinions is true, is the right temper of the mind that preserves it from being imposed on, and disposes it to examine with that indifferency till it has done its best to find the truth; and this is the only direct and safe way to it. But to be indifferent whether we embrace falsehood or truth is the great road to error. Those who are not indifferent which opinion is true are guilty of this; they suppose, without examining, that what they hold is true, and then think they ought to be zealous for it. Those, it is plain by their warmth and eagerness, are not indifferent for their own opinions, but methinks are very indifferent whether they be true or false, since they cannot endure to have any doubts raised or objections made against them, and it is visible they never have made any themselves; and so never having examined them, know not, nor are concerned, as they should be, to know whether they be true or false.

We may say, then, that science as such does not err; only individual scientists or their over-enthusiastic followers go wrong. Nevertheless this individual commission of sin is fairly common. Not only are specific applications of science put forth as unquestioned dogmas; occasionally as well we may discover a practitioner of science smuggling in a philosophy of life to sustain his dictums.

Take, for example, John Watson in his book *Psychological Care of Infant and Child*. In this book Watson warns parents quite properly against the dangers of excessive mother love. He points out that much of what passes for an affectionate treatment of a child is nothing less than self-gratification on the part of the elder. The child, in such cases, is used as an instrument for gratifying certain



thwarted emotions and hungers in the adult. Watson then proceeds to condemn affectionate demonstrations toward children. He describes what he calls "a sensible way of treating children."

Treat them as though they were young adults. Dress them, bathe them with care and circumspection. Let your behavior always be objective and kindly firm. Never hug and kiss them, never let them sit in your lap. If you must, kiss them once on the forehead when they say good night. Shake hands with them in the morning. Give them a pat on the head if they have made an extraordinarily good job of a difficult task. Try it out. In a week's time you will find how easy it is to be perfectly objective with your child and at the same time kindly. You will be utterly ashamed of the mawkish, sentimental way you have been handling it.<sup>9</sup>

But when we ask Watson how he knows what should characterize a parent's attitude toward his child, we discover that his standard is the present status of adult relations. Since adults are relatively indifferent today to the needs and the sufferings of those about them, children he thinks should be trained to indifference. There is no suggestion that perhaps the excessive manifestations of mother love and the coolness of the adult world towards the sufferings of a stranger are both wrong and that the home furnishes an opportunity for discovering sympathetic and understanding ways of living together which are neither emotional orgies nor an objective indifference.

As we have already observed, it is one of the contributions of science to education that it has substituted a healthy appeal to fact for vague and ambiguous generalizations. There is always danger, however, that the urge for definiteness and the measurable will overleap itself and neglect

<sup>9</sup> John B. Watson, *Psychological Care of Infant and Child*, pp. 81-82. W. W. Norton and Co.

the significance of the unmeasured factors operating within learning situations.

A fairly recent description of an investigation into the relative merits of the lecture-demonstration, the group-laboratory experimentation, and the individual experimentation methods in the teaching of high-school biology serve to illustrate our point.<sup>10</sup> The author states quite truly that:

If progress in methods is to be made, there must be substituted for this state of conditional emotional response the scientific attitude of the open mind and a willingness to try out different procedures. Progress need not wait upon laboratory schools. Much valuable information will accrue if teachers in typical schools will test various methods of which they have heard or which may occur to them.<sup>11</sup>

He also observes in his introduction:

Champions of the individual laboratory technique in particular maintain that it results in a number of associate and concomitant outcomes peculiar to that method. Some of their claims are manipulatory skill or laboratory technique, clearer ideas resulting from direct contact with materials, training in problem solving resulting in the general habit of scientific thinking, personal thrills from the mysteries of nature, stimulation of the imagination and development of power of observation, independent thought and action, initiative, judgment, and various other faculties.

All of these are highly desirable; but this study was limited to accomplishments which are capable of quantitative measurement.<sup>12</sup>

It is thus obvious at the start that this investigation does not purport to test all of the relevant factors involved in the three types of teaching procedure. The results meas-

<sup>10</sup> Johnson, Palmer O., "A Comparison of the Lecture-Demonstration, Group-Laboratory Experimentation, and Individual Laboratory Experimentation Methods of Teaching High-School Biology," *Journal of Educational Research*, XVIII (September, 1928), pp. 103-111.

<sup>11</sup> *Ibid.*, pp. 103-104.

<sup>12</sup> *Ibid.*, p. 104.

ured by tests were "objective in character, consisting of true-false, matching, best answer, completion, and the introduction of diagrams and drawings calling for the identification of apparatus, organisms, and structures. . . . Tests to measure retentivity were administered at various intervals."<sup>13</sup>

The conclusion of the experiment failed to indicate an outstanding superiority on the part of any one of the methods under study. As Johnson states,

The outstanding result of this study is that the three particular methods of teaching seem to differ very little in their influence upon pupil learning and still less upon pupil retention. No one procedure excelled in all of the experiments.<sup>14</sup>

But, he goes on to add gratuitously,

The seeming difference of results in the present study may, however, mask their true significance. Since the demonstration method, which at least held its own as a means to immediate learning, makes possible a considerable saving in apparatus and a very decided saving of pupil time, it may be able to more than offset any advantages that either of the other methods can offer.<sup>15</sup>

In short, our investigator has forgotten at the conclusion of his study that he was testing only a narrow range of the values presumably present in each method. Having centered his investigation of observable results only upon those effects most easily detected in the three methods and finding no conspicuous difference, he ventures to recommend the use of the most economical of the three! A collector of logical fallacies would relish this example of the tendency to generalize regarding a whole situation on the basis of a knowledge of the part, but the practical results of taking this recommendation seriously might very well be unfortunate in the lives of boys and girls whose education is thus affected.

<sup>13</sup> *Ibid.*, p. 105.

<sup>14</sup> *Ibid.*, p. 110.

<sup>15</sup> *Ibid.*, p. 111.

Closely allied to the temptation to judge a whole situation by reference only to a selected number of factors involved in it is the tendency to conclude that a truth is established merely because negative evidence is not for a time forthcoming.

One of the most striking illustrations of this fallacy is the uncritical organization of educational methods and materials in accordance with Thorndike's conception of mental traits. About twenty-five or thirty years ago Thorndike and others undertook to determine to what extent information and methods acquired in one subject transferred over into another subject. They found a very low correlation, and Thorndike formulated in consequence his theory of specific learning. All learning, he contended, is a matter of perpetuating, eliminating, and modifying or redirecting connections between situations to which the learner is originally sensitive and responses with which he is originally endowed. That is to say, learning is specific and the mind consists of traits relatively discrete and relatively independent of each other.

As a result of this theory, founded upon experiment, the work of the schools began to undergo transformation. Courses of study came to be analyzed into specific objectives in the way of information, and habits and skills children are to acquire, and methods were formulated into specific things children should do in order to insure the acquisition of specific abilities. An excellent illustration of this tendency is found in the Denver language course of study<sup>18</sup> in which we are told that the purpose of the curriculum committee has been to reduce objectives of English to single, effective, functional objectives. Professor Ernest Horn helped the committee to solve the problem of determining what language should receive major emphasis "by giving

<sup>18</sup> *The Denver Program of Curriculum Revision*, Denver, Colorado, 1927, p. 35.

the committee a complete picture of the life situations in which language is used by adults and a detailed formulation of the desirable outcomes of English instruction." With this as a basis the committee proceeds to analyze language situations into the specific abilities children are to acquire. Thus, states the report:

The present objectives as contrasted with the original ones are simpler, more functional, and more effective. How much better it is to tell the child just what he must do to become a good speaker or writer; in other words, to make it clear to him what information and knowledge, habits and skills, attitudes and appreciations are necessary to insure free, correct, and effective communication of ideas. For example, when the child is confronted with the need to tell a short story, he must recognize the many specific abilities needed in reaching his goal, the telling of the story in an entertaining manner. In planning and preparing the story, these abilities are called for: the selection of an appropriate story, a beginning that arouses interest, clear-cut pertinent sentences, and a satisfactory closing sentence. There is another group of abilities required in presenting the story effectively to the audience: the pleasing quality of voice, clear enunciation, distinct pronunciation, and the adjustment of the voice to the size of the room, to the mood of the audience, and to the dramatic demands of the situation. Each of these abilities is an immediate end at different stages in the preparation and presentation of the story. Goals defined in such detail as this are more serviceable to the pupil and teacher than those stated in vague, general terms. The original objectives were addressed to the teacher, imposing the responsibility of teaching the child how to tell a story effectively; the present objectives are directed to the child, guiding him in acquiring all the specific abilities involved in telling the story effectively."<sup>17</sup>

The Denver method is characteristic of a dominant trend in contemporary educational practice. Underlying this practice is, as we said, the assumption that learning consists in establishing specific connections between response units

<sup>17</sup> *Ibid.*, p. 35.

in the child and specific situations in the environment. On this assumption the best way to insure a child's functioning adequately in life situations is to train with direct reference to them. Carried out logically this theory of learning dissolves ideals, general principles, and attitudes. They become no more than collective nouns, blanket terms used to cover those elements common to a variety of situations. Few school men, however, who accept and apply this principle realize that, like jack rabbits in Australia, it has multiplied and increased primarily because of the absence of competitive influences. They are unaware that the doctrine of specific abilities rests upon experimental evidence which is now being challenged. Thus Professor V. A. C. Henmon writes in a most significant article on "Measurements and Experimentation in Education":

Twenty-five or more years ago when we began to apply systematically the method of correlation to the study of relationships between mental traits, the early results showed a surprisingly low correlation. One of two interpretations was possible, either our measurements of the traits in question were imperfect or else there is a high degree of independence in mental functions. The latter interpretation was accepted and has for a quarter of a century influenced very materially our theory of curriculum-making and methods, and our notions on transference of training. The reader of the accumulating literature on this important problem for educational and vocational guidance and for educational theory and practice can, however, not escape the conclusion that with the improvement in statistical methods, notably by the correction for attenuation proposed by Spearman and methods of partial correlation, with the improvement in the reliability and validity of measurements, with the increase in the number of cases, control of or allowance for the variability of groups, and the equalization so far as possible of effects of practice, the correlations reported have steadily increased. Whatever may be the causes, whether due to a common central factor or to group factors, the relationships between traits are not only positive but high. Im-

perfections in our measurements, not low relationship between mental traits, appears from the accumulating evidence to have been the sounder interpretation. Our educational theorizing and practice have, however, been shot through and through and still are by notions of the extreme specialization of mental functions and the non-transferability of training. In a reaction against discipline we have made knowledges and skills sacrosanct. Karl Pearson maintained years ago that "the true aim of the teacher must be to impart an appreciation of method and not a knowledge of facts. This is far more readily achieved by concentrating the student's attention on a small range of phenomena, than by leading him in rapid and superficial survey over wide fields of knowledge." I believe in the soundness of both propositions but they run quite counter to the educational philosophy which has underlain much of our thinking on curriculum and methods for two decades. The philosophy itself grew out of imperfect measurements and inconclusive experiments.<sup>18</sup>

It is probably true that emphasis upon specific learning has had both a healthy and an unhealthy effect upon education. Knowledge of general principles without a sense of their value in practice leads to futility. The net outcome of our experience with specific education run wild will doubtless be a sounder appreciation of the relative importance of the general and the specific, of remote outcomes and immediate values, of what is changing and fluctuating in our civilization and what are constant and relatively permanent elements of modern life; but this problem of adjustment, this necessity for recovery from an orgy of specialized education, follows from our proneness to accept a theory of learning that flourished merely because conflicting evidence was not then available.

We venture, in conclusion, to suggest one more consideration which scientific workers and those who utilize the findings of science in education need constantly to have in

<sup>18</sup> *Journal of Educational Research*, XVIII (October, 1928), pp. 187-188.

mind. We refer to the relative character of scientific method itself.

Scientific method is sometimes thought of as a procedure that exists in its own right; something independent of the field in which it operates. A more workable conception, however, views science as the most refined and accurate process man has devised for analyzing and directing experience. Thus viewed the nature of scientific method is seen to vary with time, circumstance, and the subject matter under investigation.

This is merely saying that scientific method is a product of evolution. At each stage of evolution, however, there is an attempt on the part of workers in science to carry over into their respective fields the procedure which characterizes the most distinctive and the most successful accomplishments of "science." Thus, in the days of Descartes, Newton, and John Locke, mathematics and the method of mathematics seemed most fruitful. In consequence, the mathematical method became idealized and we find John Locke writing in his *Conduct of the Understanding*:

I have mentioned mathematics as a way to settle in the mind a habit of reasoning closely and in train; not that I think it necessary that all men should be deep mathematicians, but that, having got the way of reasoning, which that study necessarily brings the mind to, they might be able to transfer it to other parts of knowledge as they shall have occasion. For in all sorts of reasoning every single argument should be managed as a mathematical demonstration, the connection and dependence of ideas should be followed, till the mind is brought to the source on which it bottoms, and observes the coherence all along, though in proofs of probability one such train is not enough to settle the judgment, as in demonstrative knowledge.

Today, however, the natural sciences are winning dramatic victories and it is not a matter of surprise that scientific workers in education should wish to import into their provinces the methods of natural science.



There is at least one significant difference in the two cases, however, which sanctions caution. The elements in a situation with which the physicist deals are known in the sense that they are definite and tangible, or, if varying, their changes are calculable. If the scientist sets up two situations, let us say  $\boxed{A B C}$  and  $\boxed{A'B'C'}$  which are alike in all relevant respects, he knows the value of these factors. Consequently, if he introduces the element  $x$  into the situation  $\boxed{A B C}$  and the result  $y$  follows, he can say in accordance with the scientific canon, the Method of Difference, that  $x$  and  $y$  are causally related.

In education, however, the factors operating in learning situations are neither so easily detected nor are they so readily assigned a value. They are not easily assigned a value because *factors* are commonly not *elements*.

May we illustrate:

Early studies in the transfer of training were conducted upon the assumption that learning situations can be analyzed into elements. In Thorndike's terminology these elements are elements of "substance" and elements of "procedure." If, for example, a child carries over a critical judgment from a laboratory situation to his appraisal of an argument, it is because he has isolated from his laboratory procedure a method of thinking which functions as an identical element in the two cases. Similarly, information or skill acquired in arithmetic may enable an individual to purchase articles at a store without being cheated because he deals with identical elements of substance. It was not long, however, before investigators discovered that "identical elements" are relative to situations. That is to say, elements which an observer might state are present in a situation are not of necessity present for the learner; or, elements operating for one learner are not operative for another. In other words, as Professor B. H. Bode has shown, identical elements are not tangible and changeless

things waiting to be noticed; they are rather something to be created, and "the problem in teaching is not to connect a mythological 'situation-element' with a 'response-element' but to develop 'systems of response' through the cultivation of thinking."<sup>19</sup> The contribution that science can make under these circumstances is to help teachers to discover favorable conditions for effecting transfer of training. It can assist them to identify the general situations which seem to favor transfer and it can supply teachers with helpful suggestions for analyzing the individual differences of pupils, but for teaching purposes transfer of training depends upon a procedure that is relative to teacher and pupil. It is not an automatic shifting of elements from one situation to another. It is rather "the extension of application of meanings to new problems or new situations."<sup>20</sup>

A second illustration of the fact that the factors with which the educator deals are not elements in a scientific sense is found in the attempt to measure traits. Much is being done at present with rating scales. Teachers' traits are being appraised, pupils' character traits are measured, and here and there we occasionally find a psychologist who still believes that an I. Q. represents a pupil's native equipment of mental traits. Hence, the temptation to view traits as something given, as analogous to elements in a scientific experiment.

A theory of biology and psychology underlies this conception of traits. When biology believed in unit characters as entities present in the germ plasm, and relatively insulated from the soma plasm, it was possible to conceive of mental traits as the psychological correlates of unit characters. But when biologists abandoned this conception of the germ plasm and began to picture the carriers of

<sup>19</sup> *Modern Educational Theories*, p. 207. The Macmillan Company.

<sup>20</sup> Bode, B. H., *Fundamentals of Education*, p. 154. The Macmillan Company.

heredity as chemical packets within each germ cell, a chemical packet, moreover, which is subject to conditions outside as well as inside the germ plasm, the lines between heredity and environment became blurred and took on the character of functions of more than one variable. \*

The relative character of traits becomes evident also when we explain their origin in terms of behavior. Psychologists are tending to abandon the hypothesis of an original endowment of a specific character, whether this original nature be conceived of as preformed bonds between situations to which we are natively sensitive and responsive units with which we are originally endowed, or whether this original nature be designated merely as instincts. The young child is now thought of rather in the words of Watson, as a "piece of unformed protoplasm, ready to be shaped by any family in whose care it is first placed."<sup>21</sup> On the other hand, this environment which shapes the child is also relative to the individual. Environmental factors in education do not consist of the situation as described by objective observers. It consists, rather, as Dewey says in *Democracy and Education*, of those conditions which promote, hinder, stimulate, or inhibit the characteristic activities of the living being. Consequently, what constitutes an environment for one child constitutes a different environment for another.

Manifestly, if traits are the functions of a variable heredity and a unique and individual environment, they can be

<sup>21</sup> *The Ways of Behaviorism*, p. 28.

For a more complete discussion of the relation of heredity and environment with educational implications, see:

Jennings, H. S., *Prometheus, or Biology and the Advancement of Man*. New York: E. P. Dutton & Company.

—, *Biology and Human Welfare*.

Thayer, V. T., *The Passing of the Recitation*. Boston: D. C. Heath & Company, Chs. VII, VIII, IX.

*Twenty-seventh Yearbook*, National Society for the Study of Education. Bloomington, Illinois: Public School Publishing Company.

measured and described only as manifestations of a living being, under given circumstances and at a given time.

This conclusion applies not only to the value of mental traits but to behavior traits as well, and even to the traits listed on a teacher rating scale. Let us suppose, for example, that a supervisor enters sympathetically into his teachers' problems, gives helpful suggestions, supplies the teacher with professional literature and information that enables the latter to secure new ideas, which he can utilize in his teaching. Under these circumstances the application of a rating scale in the hands of an objective observer will probably lead to a high rating of the teacher in loyalty and coöperation and professional interest.

Then comes, let us say, a change of supervisors and a nagging, dogmatic, rather dictatorial, and unsympathetic supervisor assumes charge of the school. Again our objective rater appears to score the teachers' traits, and behold loyalty and coöperation and professional interest are low! Shall we say that the traits are given, definite and tangible, or that they are factors that vary with conditions?

We might push our analysis farther and include our objective rater. Let us suppose now that the observer received his training in the old school. He believes in discipline; in teaching the fundamental operations; in pupils sitting in rows and speaking only when questions are asked. With this conception of discipline, classroom management, and teaching technique he scores teachers on these points. And then he is given a leave of absence. He visits progressive schools, observes closely and, after a period, sympathetically the results of the new freedom and creative education. He becomes impressed with the necessity for organizing subject matter and classroom conditions so as to bring about the identification of pupils with the work of the school. He returns from his leave of absence and

resumes his former occupation of scoring the performance and traits of teachers. Will he assign the same value to the classroom conditions of discipline, classroom management, and teaching technique as formerly?

One may characterize traits in part at least as Spinoza long ago characterized ideas of imagination. Peter's idea of Paul, he writes, "indicates rather the disposition of Peter's body than the nature of Paul."

We may conclude then that the critically minded educator will be wary in his use of science. He will endeavor to bear in mind that at best science is an instrument designed to realize values and ends which may require justification outside the field of scientific method. Consequently, he who uses an instrument of science must assure himself that the ends thus promoted are in themselves worthy. Secondly, our sophisticated educator will scrutinize "scientific" findings with a view to determining the extent and the conditions of their validity. He will hesitate to build a program upon conclusions that derive from data only partially representative of a total situation, and he will be chary of hypotheses which stand merely in the absence of conflicting evidence. And, finally, he will realize that there are certain permanent limitations upon the application of science to education for the reason that the factors which function in a learning situation are chameleon-like and in consequence different from the definite and tangible elements with which scientists in other fields may operate.

Nevertheless there are certain general characteristics of scientific method which are indispensable instruments for progressive teaching and supervision. Science, wherever applied, insists upon substituting objective judgment for prejudice, emotion, preconceived ideas, or opinion based upon uncritically accepted data. Scientific method labors ever to refine conclusions and inferences by scrutinizing old data in order, if possible, to detect certain neglected

aspects in the inferences based thereon; and it busies itself with the gathering of new data for the purpose of generating new hypotheses. It is ever loyal to truth but it distinguishes between truth as a procedure, a method of inquiry, and truth as a cherished conclusion. It is neither an arbitrary subject matter nor an arbitrary method but rather, as James says of metaphysics, "an unusually obstinate attempt to think clearly and consistently."

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## CHAPTER V

### MAKING SCIENCE MORE THAN THE COMMONPLACE

In discussing the limitations of the autocratic method of supervision we pointed out that it encourages the withdrawal of able and original teachers from the profession of teaching, because it is keyed to the least efficient and tends to rob all of initiative and self-direction; that it confuses permanency of tenure with stagnation, and looks for effectiveness to the securing of new blood through a heavy teaching turnover rather than through the professional growth of teachers in service; that, in common with autocratic government generally, it fosters docility and dishonesty, discouraging that frankness and loyalty and coöperation which come unsolicited where respect and allegiance flower naturally out of recognized leadership; and finally, it imitates methods of "hire and fire" employed originally in business, but which modern business in its most advanced stages of personnel management is seeking to eliminate.

It is by no means true that the application of science to teaching and to supervision need be identical in character with the methods of autocratic supervision. Indeed, we shall find, when we come to discuss the ways in which a supervisor can assist his teachers, that science and scientific method are indispensable tools for the improvement of educational procedure. Science, in other words, is in itself neither democratic nor autocratic. Science is impersonal. It serves its masters without regard for their political connections.



Moreover, as we have seen in Chapter III, science lends itself equally to the diagnosis of individual peculiarities and to generalizations which ignore individual differences. In short, it is the manner in which he applies the results of science that determines whether or not a supervisor is democratic or autocratic.

The authors of this book have already suggested that the way in which the supervisor conceives his relations to his teachers and the consistency with which he translates his conception of supervision into practice are of fundamental importance. Consequently, we must go farther than to suggest merely that he apply the findings of science to supervision. (That goes without saying, if the supervisor is to be progressive in his outlook and his program.) He must consider particularly the effect of his methods upon the supervisor-teacher relationship. For this reason we shall suggest in this chapter certain precautions to be borne in mind when applying science to the supervisory situation.

First there is need of patience which will temper the urge for immediate results. This urge is frequently like "Vaulting ambition, which o'erleaps itself, and falls on t'other side" because the supervisor neglects to enlist his staff in his scientific program. It is not unusual for a supervisor, convinced in his own mind of the efficacy of a new procedure, to overlook the necessary preliminary education of his staff. This may be no more than the error of good intentions. His enthusiasm for progress causes him to forget that he is dependent for his returns upon the coöperation of his colleagues. At bottom a supervisor's success depends upon cordial relations and frank understandings with other people. This requires of him the ability to enter sympathetically and appreciatively into the lives of others, to see the world through their eyes as well as through the eyes of science.

This suggests one reason for the superiority of teacher

participation in curriculum revision over revision at the hands of experts. Democratic curriculum construction enlists directly the initiative of the classroom teacher. The individual teacher comes thus to feel that new proposals and more refined methods are his concern. It is undoubtedly true that an expert can write a course of study or plan a curriculum which excels in quality one worked out by committees consisting of teachers. A wise supervisor, however, will utilize his experts or his own expert information to supplement the efforts of his teachers. He knows that a course of study that has been forged out of the coöperative action of teachers will raise the general level of teaching because in the course of their work his teachers will have tried out and perhaps have discovered new and better methods of teaching. Moreover, when teachers have identified themselves with a project and have tested new proposals under actual classroom conditions, there is every assurance that their conclusions will function in practice, as against the indifference, if not the hostility, that frequently greets new proposals which seem to be foisted upon them by outside experts or an overly enthusiastic supervisor.

The objective technique described by Knight to which we referred in Chapter III suffers from its deliberate disregard of teacher originality and initiative. Knight himself states that the theory of supervision which underlies his procedure "would operate better on the idea of a master surgeon" conception of supervision "than on the soviet idea of school organization." It would be more accurate to say that it is analogous to a situation in which a general directs the detailed operations of an army in action. Thus Knight writes, "When a teacher's weekly report shows that addition of fractions will soon be finished, the supervisor should make sure that this skill is properly mastered before the teacher goes on to the subtraction of

fractions. . . . It is for the supervisor to say whether or not the class is to go on." And yet the equipment possessed alone by the supervisor, which thus enables him to regulate in detail the arithmetical operations of his teachers "will take about fifty hours of intensive study" to master!

A detailed observation and control of a teacher's activity may be advisable and necessary in the initial stages of his training and development. But this does not sanction a teacher being as clay in the hands of his supervisor. Even at this stage the inexperienced teacher should be encouraged to sense and to define his own teaching problems and to try out ways and means for acquiring skill in the practice of his profession. Teaching devices which enable teachers to detect pupil difficulties and to institute appropriate remedial instruction should become the common property of the staff. If perchance there is good reason for a central office to carry on a general testing program, care should be taken to see that agreement is secured in a preliminary meeting of teachers in which common difficulties are frankly discussed and suggested remedies examined. In meetings of this character it can easily be made clear that for the sake of securing results which will bear upon characteristic difficulties a centrally administered testing program should be launched.

When a central office carries on in this way a service expressive of a general need, the outcomes of which refer back and become available to individual teachers, there is no suggestion of autocracy. Knight's procedure is in danger of paralyzing initiative because it implies a fundamental lack of confidence in the professional interest and ability of his teachers rather than because it involves centrally administered tests. It is not the supervisor's prerogative to determine when a teacher shall conclude one unit of work and pass on to another. That is an inherent part of a teacher's professional activity. If, however, there is general dis-

organization, or science has made a contribution that promises well, or there is clearly a need and an opportunity for the improvement of existing conditions, it is the function of the supervisor as an educational leader to draw these facts to the attention of his teachers and to assist them in modifying their practice. He functions best as a supervisor when he directs a cooperating group of teachers toward the realization of common ideals.

In our contention that the results of science should be used to stimulate originality rather than to crush it out, we are suggesting merely that supervisors practice in their relations with their teachers the same principles of psychology and pedagogy that they quite properly preach. It is hardly consistent for a supervisor to insist upon lock-step methods of supervision and at the same time to urge his teachers to make adequate provision for individual differences as between children. All that can be argued on behalf of the recognition of differences of ability levels in children, or differences in rates of learning, or the need of enriched opportunities on the part of superior pupils, holds true of the supervisor-teacher relationship. It holds true of school regulations and it holds true of the course of study. It is not uncommon to find petty restrictions upon a teacher's freedom or the exercise of individual judgment because a supervisor discovers that one or two teachers are abusing certain privileges. It is natural because it is convenient for a supervisor or an administrator under these circumstances to ask all teachers to submit to inconveniences for the "good of the cause." There are times when this subordination of private convenience or private judgment to the general good is essential. But the supervisor must always assure himself that in seeking one value he is not sacrificing greater concerns. Punching a time clock may identify the habitually tardy teacher, but it may also suggest a lack of confidence in one's staff such that it discour-

ages a whole-hearted devotion to the cause of teaching. We have seen the brilliant accomplishments of a teacher, a genius in his own field, nearly ruined because of his principal's dogged insistence upon conformity to a minor regulation. Frequently the spirit and atmosphere of joyous work is destroyed because of this neglect of relative values. Important as conformity may be, a supervisor cannot forget that the Sabbath was made for man, not man for the Sabbath.

Classroom practice affords excellent opportunities for capitalizing individual differences. One authority on supervision writes as follows:

When teacher and supervisor face the task of assigning and teaching lessons, they need to have in mind the same fundamental facts concerning the definition of method, the principles underlying method, the problems of teaching growing out of an understanding, and the principles and problems involved in deciding upon the technique that should be practiced. The supervisor cannot make definite, pointed, clear-cut suggestions, and the teacher cannot appreciate such suggestions when they are made unless both have in mind the clear distinctions that should be made between these various phases of the whole performance of teaching.<sup>1</sup>

Were this agreement possible, we should question its desirability. Differences of opinion as between teachers with reference to methods of teaching and organization of subject matter are essential for progress, unless we are to assume that the last experiment has been performed and the evidence is ready for a final salting down. A supervisor should welcome, not crush out, differences in points of view, and he should seek to use these differences as instruments for new discoveries. If he is fortunate enough, let us say, to have two teachers, one of whom believes the salvation of secondary-school teaching is found in the

<sup>1</sup> Nutt, H.W., *The Supervision of Instruction*, p. 75. Houghton Mifflin Co.

Winnetka plan and the other believes that the Morrison technique is the farthest point north in teaching skill, he should rejoice, for he has at hand an opportunity to interest all of his teachers in scrutinizing and examining their own methods. He will encourage the two teachers in question to organize the work of their classes in accordance with their favorite method, and he will solicit permission for their colleagues and himself to observe these procedures in action. This will tend to arouse faculty interest and discussion. Perhaps it will lead to an analysis of the merits and limitations in the two plans. Each observer will begin then to test his own teaching in the light of the general discussion, and the net result will be an improvement and modification of teaching all around, including that of the two apostles. Moreover, the critical appraisal of teaching thus fostered and developed will not only be self-initiated; it will also be more helpful because more vital than the improvement which results from a meticulously supervised situation.

What is true of new methods of teaching is equally true of scientific aids to teaching. When capable teachers are encouraged to try out and to adapt to local conditions the results of scientific investigations, it is possible to test values without either the ill effects of general opposition on the part of conservative teachers or perhaps the discouragement and cynicism that usually follow the failure of a suggested panacea to operate in practice. In other words, the fact that a few teachers in a single school experiment with a new tool tends to arouse a critical but a disinterested and objective interest. This lays the foundations for a gradual extension and perhaps uniform adoption of the new — somewhat slowly perhaps but with every assurance that it conforms to the peculiarities of local conditions.

There is a further reason, however, for taking into account individual differences on the part of teachers. Teachers,

as well as pupils, differ in their methods of work and the quality of their performance. If we insist that superior children be provided with an enriched curriculum and be taken out of a lock-step method of teaching, should we not also seek to free the superior teachers from a lock-step supervision? Freedom to experiment, the opportunity to exercise initiative, the privilege of working with and helping a less experienced colleague are rightful recognitions of distinguished service.

Not only may we say that freedom is a natural outcome of professional performance, but we should also add that it is essential for the progressive development of a school system. Too frequently a supervisor devotes all of his energies toward improving the services of young and inefficient teachers. What attention he gives to the veterans of the staff is restricted to demands of conformity "for the sake of the whole." If an excellent teacher is not thus interfered with, he is frequently left to go it alone. Little if any interest or attention is given to his problem. He is encouraged to fall into a rut. On the other hand, a freedom which plays into the general cause, which utilizes distinguished work for the sake of stimulating the interest of all teachers, causes the veteran to sense the joy that comes with competent professional activity and it assures his continued growth. Moreover, his growth under these conditions will not be merely that of self-satisfaction, which is truly inimical for his own healthy development. His contributions will be subjected always to the observation and friendly criticism of his peers.

It may be objected at this point that these methods of stimulating initiative and originality lack completeness and depend too much for their success upon grasping at happy circumstances. This suggests in reply a criticism that should be made with reference to the type of objective supervision advocated by Professor Nutt and described in

the previous chapter. This method, it will be recalled, calls for careful and detailed observation of teaching over a period of time. The supervisor takes notes on procedure, indicates the pupils' reactions, and gives to the teacher a carbon copy of the record, which thus serves both for the teacher's analysis of his teaching and as an objective basis for conference.

This is called "objective supervision," but it should be pointed out that it is objective only in the sense that both teacher and supervisor base their analysis and their discussion upon identical data. The supervision, the suggestions and criticism, the *inferences* drawn from these data are by no means objective. Such supervision is as valid, as pertinent, as wise, or as irrelevant as the supervisor who administers it.

It is a sound principle of learning — and, by analogy, of supervision — that we should concentrate upon one or two essential items at a time. To give to a teacher a complete inventory of his difficulties might very well be the most effective method of ruining his future possibilities as a teacher. Indeed, it may be better to keep a teacher in ignorance for a time of rather insignificant difficulties until he has mastered more important essentials. Consequently, a sympathetic observation of a teacher's work by a supervisor who retains the teacher's confidence may lead as well as Professor Nutt's technique to concentration upon the most important phases of his teaching. We do not venture to state dogmatically that the supervisor should not take complete notes of what he observes. Nor do we believe that it is indispensable for him to do so. Whether or not it is advisable will depend upon such variable factors as the nature of the teacher and the supervisor, the amount of supervision the supervisor must do, his opportunities for immediate conference with the teacher, and similar considerations. Our point here is that the mere activity of



taking detailed notes does not make the supervision objective, nor is the method of giving to the teacher a complete record of observation necessarily the wisest or the most helpful method to follow. The supervisor must always regulate his procedure with reference to the peculiarities of his teachers and with an eye upon relative values.

The supervisor, in his use of scientific method, must also guard against an emphasis upon securing tangible results, certain fundamental minimum essentials, at the expense of equally valuable but less easily measured outcomes. When teachers are required to examine their classes at regular intervals upon mechanical processes of learning, it is easy for them to conclude — unless assured otherwise by equally dramatic emphasis — that their success is measured largely, if not solely, by reference to results of this character. It therefore becomes natural for them to emphasize and to strive more and more, in their relations with their pupils, for the standardized effects of learning and to neglect more subtle, but equally important, factors in child development. Moreover, if the diagnoses of teaching difficulties thrust upon their attention consist always of what seem to be the general and typical, those that “fall into certain well-defined types,” they are in danger of neglecting the analysis of both behavior and learning problems that are due to less obvious but more fundamental causes of maladjustment.

Generally speaking, teachers are only too prone as it is to overemphasize the significance of behavior traits that function for good or ill in learning situations and to ignore the importance of other factors of growth. For example, E. K. Wickman in his study of *Children's Behavior and Teachers' Attitudes* discovered that teachers rate as serious in future development those behavior manifestations of children which involve non-conformity to classroom order and discipline or failure to make expected applications to

prescribed school work, or which violate the teacher's standards of integrity; while behavior manifestations such as shyness, fearfulness, sensitiveness, unsocialness, suspiciousness, and over-criticism of others are either ignored or rated by teachers as relatively non-serious. Wickman compiled a list of traits which constitute behavior problems and asked teachers to appraise them in the order of their seriousness. He then submitted the same list for appraisal to thirty clinicians who were "all actively engaged in the study and treatment of behavior disorders in children." He found that the two groups, with a few exceptions, submitted diametrically opposed judgments. "Whereas teachers considered shyness, sensitiveness, unsocialness, fearfulness, dreaminess, among the least serious of all problems, the clinicians ranked them together with unhappiness, depression and easily discouraged, resentfulness, physical coward, suggestible, over-critical at the very top of the list as the most serious problems."<sup>2</sup> Cruelty and temper tantrums (which are obviously aggressive traits) alone "were assigned about the same degree and position of seriousness by the clinicians as by the teachers."

Wickman writes in this connection:

In interpreting these findings it is essential to bear in mind that the clinicians, unlike teachers, were not laboring under pressure for educating children according to prevailing curricula and thus were not specially sensitized to those problems in behavior which disturb or frustrate the teachers' interests in the educational achievement of pupils. Moreover, in making their ratings, the clinicians were influenced, both by their particular professional interests and by specific instructions, to consider (1) the effect produced on the future development and on the social, emotional adjustment of the child by the possession of any behavior problem which is allowed to run its usual course; and (2) the need for

<sup>2</sup> Wickman, E. K., *op. cit.*, p. 126. Commonwealth Fund Division of Publications.

remedial work, and the nature of remedial efforts, in treating the behavior disorders in question.<sup>3</sup>

As Wickman states, the teachers and the clinicians rated the seriousness of behavior traits from somewhat different points of view, but if education is concerned with the development of a child's total personality, teachers should be encouraged constantly to give weight to elements in conduct which the "pressure for educating children according to prevailing curricula" tends to blur.

The bearing of behavior upon success in school is further illustrated in a study reported by Dr. Eleanor Hope Johnson. Dr. Johnson found from an investigation of over-aged pupils in public schools that children who were problems in school and community "are more than likely to be retarded in school, to repeat grades, and to receive low scholarship marks, at the same time they have more capacity to learn and are in better physical condition than children equally or more backward, but docile."<sup>4</sup>

Does this not indicate the teachers' need for assistance in acquiring a more objective attitude toward behavior traits in pupils?

A supervisory program that stresses uniformity and standardization in academic accomplishment may detract attention from behavior traits which are vitally significant in growth. It may also divert a teacher's attention from causes for difficulty in learning which fall outside typical patterns. The more problem pupils are studied, the more common it is to find an explanation for failure in such subjects as geometry or algebra or science in conditions that antedate the subject in question. When we come to discuss the diagnosis and treatment of problem pupils, we shall illustrate this point in detail. For the present we

<sup>3</sup> *Ibid.*, p. 129.

<sup>4</sup> "School Maladjustment and Behavior," *Mental Hygiene*, Vol. XI (July, 1927), pp. 563-564.

must content ourselves with the general statement that maladjustments in learning and behavior may spring from such causes as disability in reading, inadequate training in the fundamental operations of elementary-school subjects, or even in failure on the part of a pupil to secure a rich foundation of concrete and meaningful experiences in his early years which will enable him to read significance into his later abstract learning.<sup>5</sup> A supervisory program which stresses the diagnosis and treatment of all types of pupil maladjustment and seeks to develop an increasing sensitiveness in teachers to their existence will not slur over the detection and cure of the more obvious and common difficulties in learning, but on the other hand an "objective technique" that operates vigorously with ready mixed medicines for the treatment of ills of "well-defined types" . . . which "can be predicted with some degree of certainty" must safeguard itself from detracting the interest and attention of professionally minded teachers from an equally scientific but more individual approach to the understanding and treatment of pupil maladjustments.

Thus far in this chapter we have discussed some general considerations which a supervisor will wish to keep in mind in applying the results of science to supervision. We have stressed particularly those considerations which bear upon his relations to his teachers. Thus we have cautioned against an application of scientific techniques in such a way that they will militate against encouraging initiative and originality and experimentation on the part of individuals. We have also endeavored to emphasize the possibilities in the way of progress which reside in a policy of encouraging individual and original contributions from one's staff. And

<sup>5</sup> A child of high I. Q. who experiences nothing but academic success in elementary school and the first year of high school frequently encounters difficulty in geometry because his sheltered physical existence in his early years has failed to develop in him an adequate sense of spatial relationships. (Based on unpublished data gathered at the Ethical Culture School.)

finally, we have warned against the danger of unwittingly neglecting subtle and significant factors in the learning and behavior of pupils as a result of an excessive concentration upon the obvious.

The contributions of science to education are many and varied. Scientific procedure is central and indispensable for the intelligent conduct of education. So central and so important has it become that many have come to accept its dictum without question. They no longer accord it a rightful place as an instrument; they would raise it to the station of a god before whom all men are to prostrate themselves and worship in a childlike faith. For this reason a supervisor who would function as an educational leader with a sense of direction must distinguish carefully between the valid and the invalid utterances in the name of science, and he must consider critically with what reservations he will utilize its contributions.

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## CHAPTER VI

### A DEMOCRATIC CONCEPTION OF SUPERVISION

Science, as we have seen, has affected educational practice in at least two ways: it has promoted an increasing understanding and appreciation of individual differences, and it has served as an instrument for the imposition of norms and standards upon the individual. We have suggested in the previous chapters that, when science operates as a standardizing agency in supervision, it does not differ at bottom from autocratic supervision. Although the hands appear to be those of Esau, the voice is still the voice of Jacob.

There is no necessary inconsistency, however, between science and democracy. In succeeding chapters of this book we shall attempt to describe ways in which science contributes to a program of democratic supervision. As an introduction to this discussion we must first indicate what is meant by "democratic supervision."

Traditionally the term "democracy" refers to a political organization in which each member of a group contributes his opinion to the formulation of common decisions. At its best a political democracy functions in such wise that group decisions grow naturally out of the free expression and a general consideration of each one's views. At its worst political democracy implies the tyranny of the majority and a ruthless erasure of individual opposition by dominant patterns of thought and action.

Conformity to common patterns of belief and behavior may follow from physical compulsion or it may result from

customs and habits that grow more or less unconsciously out of ways of living. Thus, it can hardly be said that all men in the United States are compelled to abandon their straw hats on the evening of September fourteenth and don their fall outfit, irrespective of weather conditions on the morning of the fifteenth, but few deviate from this custom. They observe the unwritten code by virtue of a *disposition* to conform to an accepted standard in garb. This *disposition* to do as other people do is frequently termed the "democratic spirit" and in common thought democracy and the democratic attitude are generally identified with an equalitarianism in which all must possess alike, dress alike, act alike, and think alike.

These views of democracy are inadequate and seem to extinguish the individual rather than to exalt his significance. Nevertheless, despite the fact that in its crude functionings democracy is habitually inconsistent and exercises little tolerance and patience with individuals who differ from the herd, there has emerged as an integral part of the democratic ideal an uncommon faith in the common man. From this respect for the common man it is but a step to a recognition of the value and the worth of an individual as an individual. Once this respect for the individual is established, it is possible to generate in the minds of men an appreciation of the importance of differences, and the unique qualities in human beings receive recognition as well as do the commonplace.

There is good reason to believe that our conception of the democratic ideal has evolved to this point today. The term "democracy" no longer denotes exclusively a form of political organization. Neither is it synonymous with equalitarianism. It implies rather an attitude which human beings assume toward one another such that the actions of one are regulated in the light of a sympathetic appreciation of their significance and meaning in the lives of others.



Under these conditions the differences between people are valued as well as the points they may have in common. The thing that matters most is the development within each individual of an ever-growing sensitiveness and responsiveness to others.

A sympathetic response to one's fellows is a basic condition for realizing the democratic ideal. It is one with the development of an imagination such that while one may act with independence and fearlessness of judgment, and deviate at times widely from the convictions of his group, he will always be fully conscious and considerate of the effects of his actions upon others. As we have already indicated, this conception of democracy both respects and encourages differences, but it does not confuse a difference in function with superior and inferior.

As applied to the supervisor-teacher relationship, the democratic ideal does not sanction the imposition of the supervisor's will upon his colleagues. Neither does it permit of a relationship in which each member of his staff goes his own way without dynamic connections with his fellows or the aims and purposes of the school as a whole. Democratic supervision implies that a supervisor will strive, by virtue of his position, to organize life within his school so that all factors in the situation — supervisor, teachers, pupils, and even janitors — will carry on their functions coöperatively and in such wise that each can define and perform his duty with an increasing appreciation of its bearing upon the functions of others.

We may say, then, that the democratic supervisor endeavors to function as an educational leader in realizing the aims and purposes of the secondary school. As supervisor he occupies a central position. His colleagues are largely specialists who, by virtue of their special interests, are constantly in danger of losing perspective, of failing to see their subject or their department as but one element in

a larger design, as but one influence bearing upon the total life of the pupil. Consequently, it is he who must assist them to translate the objectives of secondary education into the details of classroom procedure, the selection and organization of subject matter, curricular arrangements, extra-curricular activities, and the like.

It is not sufficient to state, however, that leadership along the lines of the distinctive purposes of a democratic secondary school defines in a general way the task of democratic supervision. Before this statement is entirely clear, a word must be said regarding the characteristics of democratic leadership.

In a recent address to a group of business men, William C. Redfield, Secretary of Commerce under President Wilson, declared that American employers of labor are beginning to distinguish between drivership and leadership.

This statement serves to mark, if no more than negatively, one step in the evolution of the meaning of leadership. Under a despotic system of government leadership and drivership are identical and the leader is one who succeeds in imposing his will upon his subordinates. Benevolent despots and successful military leaders have discovered, however, the value of identifying the wills of their followers with their own purposes. A Cæsar or a Napoleon is by no means satisfied merely to receive implicit obedience. His brilliant achievements result in part from a magnetic personality, which envelops the individual purposes of his followers and melts them into one that coincides with his own.

This is still a prevalent conception of leadership. Even in so-called democratic societies the ability to appropriate the wills of others and to weave them into preconceived patterns is thought to constitute genuine leadership. Leadership thus becomes synonymous in many respects with what the psychologist calls "suggestion," and the most

successful leader exercises an influence not unlike a hypnotic influence over his followers.

This conception of leadership fails, of course, to distinguish between the means and the ends of leadership. The followers of a magnetic leader can switch from one cause to another without inner conflict because their allegiance is personal only.

Manifestly both leadership and loyalty to a leader of this character are inconsistent with the purposes of self-government. Nevertheless teachers and administrators are satisfied at times, in the interest of their own comfort, to utilize and develop in children this type of leadership. As William H. Burnham states in his book *The Normal Mind*:

It is generally assumed that . . . the leader who has a pleasing personality, who can make people give up their own interests cheerfully, who looks after everything relating to the group, and makes everyone do the conventionally right thing, is a good leader. . . . With such a leader everything goes smoothly, a perfect group machine is developed, and each individual plays his own little part in the group under the direction of the leader.

From our present point of view such a leader, however, is not the best leader, often is a dangerous leader; and in the spontaneous group activities of children not infrequently the influence of such a leader dominating a group is shown in large letters in the misbehavior . . . that appears in such groups. The same danger, of course, is connected with the group leaders in the school groups, camp groups, and the like, where teachers pick out those boys and girls who are naturally leaders and allow them to control the group. Since such leaders by their pleasing personality easily control the group, teachers are apt to be pleased, and the evil results coming from the subjection of the individual members to the will of the leader and sometimes from the real tyranny of the leader, are overlooked.<sup>1</sup>

Democratic leadership is consequently no more synonymous with mere dominance than with drivership. The

<sup>1</sup>Pp. 271-272. D. Appleton and Company.

democratic leader may express the common will of his group, but this common will represents the outcome of coöperative thinking and testifies to more than one individual's contribution. Leadership consists in focussing the best thought of oneself and one's colleagues upon a common problem and organizing the results of this united deliberation into an accepted program of action. As against the view that the supervisor must lay down dogmatically an interpretation of the aims of secondary education which his staff must thereupon go forth to realize, we suggest that he will stimulate coöperative thinking and action in the direction of a progressive definition and realization of the purposes of secondary education.

In chapters to follow we shall attempt to give a greater degree of definiteness to this conception of leadership, particularly when we discuss the relation of the supervisor to his teachers through such contacts as classroom visitation, curriculum organization, and measuring pupil progress. As a preliminary to an examination of these more special problems it may be well to illustrate what we have thus far said by indicating some ways in which a democratic supervisor can work with his teachers.

As we have already suggested, we interpret the task of the supervisor to be that of so organizing his work that teachers are encouraged to realize their highest potentialities, all with the final end in view that the school in its organization within and without the classroom shall contribute towards the preparation of boys and girls for an intelligent participation in democratic citizenship. This is the ultimate criterion of a supervisor's success. It is the light for his path and by reference to it must he order the details of his daily tasks.

We recognize that democracy is something to be achieved and that anything which is to be achieved must be approached gradually. It does not come like a gift from the gods. It

is for this reason that supervision should be viewed as an affair of levels, each level representing approaches to a democratic relationship between a supervisor and his teachers. On the lowest level is the traditional relation between the supervisor and his teachers. It is the stage of development rendered necessary by the fact that many teachers are still untrained and are transients in the profession. Such teachers cannot be permitted with safety to go it alone. But on this level of operations the effort of a supervisor should be not to perpetuate a meddling situation, an autocratic relationship, but to solve his problem with an eye to the ideals of higher levels. He should strive to create the conditions that will lead to a state of greater self-determination.

On the highest level of teaching are the mastercraftsmen. As regards the details of their work they are quite capable of independent action. They are experts, but by virtue of their expertness they are subject to all the temptations towards narrowness and isolation which beset experts; they, too, require the leadership of a supervisor.

Under normal conditions a supervisor must deal with teachers on various levels. Some are capable of independent action. Others are still dependent. This calls for a supervisory policy that adapts itself to the needs of both groups.

A complete discussion of democratic supervision would deal with the measures appropriate to employ on all levels of proficiency. At this point, however, we wish to discuss the supervisory leadership of those teachers whom we are only too prone to forget just because they are not involved in difficulties sufficient to require outside assistance.

In the first place, if possible, a democratic supervisor will teach. We do not say that a successful supervisor must be a good teacher, but we do say that when it is known that he can teach, there will accrue naturally to his office a dignity and an influence difficult to secure otherwise.

Only too frequently do inexperienced principals issue rules and regulations and supervisory instructions which serve as smoke screens for their own haunting sense of an unfamiliarity with the realities of the situation. They would do better to begin humbly and establish direct contacts with the schoolroom. In the proportion that they succeed in solving actual problems of teaching will they build up a body of experience which can serve at once to vitalize their own professional growth.

We are not advocating a plan whereby a supervisor takes a class in order to demonstrate to a novice how it is done, expecting thereafter that the novice's success will be measured by the degree to which he imitates his superior. We have in mind, rather, that through actual teaching a supervisor can direct his own efforts towards those strategic points where he wishes his teaching staff to concentrate its attention. Suppose, for example, a new method of teaching or a new organization of subject matter has been suggested. He can first center the discussion of his faculty upon the problem and thus ascertain their state of mind. If, in his opinion, the matter should be followed up further, he may express his desire to try it out in his own classes and invite the criticism and assistance of his teachers. Thus, in a perfectly natural manner will he stimulate mutual observation of teaching and interchange of ideas with the consequent modifications of practice which a successful experiment will bring. By thus teaching from time to time in all grades and dealing at first hand with all conditions of a school problem a supervisor can influence in a multitude of ways the professional interest and development of his colleagues.

A second method for securing the professional development of one's teachers is through the organization of the faculty or a department in such a way as to secure committee concentration upon definite problems, and a pooling of the

results of committee work. Principals are beginning now to appreciate the values that come from enlisting the efforts of their teachers in the definition of rules and regulations of the school and in organizing the social and recreational activities of the pupils.<sup>2</sup> The same procedure will yield excellent results in curriculum construction and teaching methods because these matters intimately concern professional practice. It is important, in initiating faculty action, to begin with problems that are near to the hearts of all. It is also important to avoid a stereotyped organization into which standing committees so frequently degenerate. It is well to ask teachers to suggest problems upon which to begin study. In one school with which we are familiar, a representative committee met for the purpose of defining the problems upon which the faculty should concentrate for a year. When the chief problems were stated and classified, the faculty organization followed the lines thus indicated.

When the committees are formed and work is begun, one of the chief functions of the supervisor is to assist in gathering necessary materials, "to sit in" at their meetings when possible, and to keep in touch with their work in order to guide them naturally along profitable routes.

In all such activities the supervisor must function as a stimulator of research. His office should grow into a clearing house of information and a coordinating agency of faculty and committee action. The materials which he makes accessible to his committees and to individual teachers, together with his own suggestions and criticisms, will give form and character and balance to work done. One of his chief duties, therefore, is to organize his office in such a way that it has available information regarding new

<sup>2</sup> For a good description of an experiment in this procedure, see: Deam, Thomas M., "Teacher Coöperation in the Administration of the High School," *School Review*, XXXIII (February, 1925), pp. 126-130.

departures elsewhere, the leading professional magazines, publications of bureaus of research, of societies for the study of education, and of governmental departments. Much of this material may be had by merely requesting that one's name be put on a mailing list. When the material is received, a glance will determine whether or not it is of interest or value to individuals and groups. By judiciously calling a teacher's attention to work carried on elsewhere or to results of some significant experimental procedure, an interest may be aroused which will eventually lead a teacher out of a rut hardened by years of repeated travel.

A further important service that a supervisor can perform is to act as a clearing house of information and a coördinator of distinctive work done by his teachers. His position is such that he can inform himself regarding their needs, and he should make it a point to advertise significant contributions of his colleagues. He should plan group meetings of his faculty at which teachers report on work they are undertaking or plan to undertake. He should use these reports as a basis for a friendly but critical study of the experiments under review. This not only encourages teachers to blaze new trails but it also fosters constructive educational thinking and a critical attitude which will eliminate half-baked ventures.

Moreover, where there is free communion between teachers, it is possible to secure uniformity where uniformity is essential and variation and experiment where these are desirable. Likewise this constant pooling of criticisms and suggestion, with the mutual visitation it encourages, tends to keep experienced teachers on their mettle as no other method can do. One of the severest criticisms of the existing state of supervision is its tendency to neglect and ignore those teachers who have passed beyond the stage of novices.

The clearing-house function of supervision should not be confined, however, to educational practices at home. The



wise supervisor will constantly throw into the caldron of educational discussion observations and information regarding significant events elsewhere. This he will do in order to incite his teachers to try out similar work at home, or to throw light on ventures under way or to guard against mistakes not otherwise foreseen. In this connection also he will seek to establish valuable relations with outside agencies.

A profitable source of help will be found in the utilization of the social and educational agencies of both a private and a public character which are so numerous today. In their book *Fitting the School to the Child*,<sup>3</sup> Irwin and Marks describe the transformation of Public School 64 in New York City through the practical applications of psychology. What began with merely a sectioning of pupils on the basis of intelligence tests ended with an ungraded room, special classes for the gifted, the dull, normal, and neurotic children, and an experiment in curriculum revision for normal children. These special provisions called for facilities not found in the school, since it was situated in a crowded New York tenement district. Nevertheless a revolution was effected by utilizing such organizations as the Public Educational Association, the Vocational Service for Juniors, and the neighboring settlement houses. Not all communities are so richly supplied with extra-school agencies as is New York City, but to a lesser degree affiliations can be established with similar organizations in any locality. These relations are beneficial to both parties. A social worker's point of view and information will frequently clear up a knotty school problem, while the school's knowledge of the child enables the social worker in turn the better to understand a family problem.

But it is more particularly with reference to the professional development of teachers that we suggest this estab-

<sup>3</sup> Irwin E., and Marks, L. *Fitting the School to the Child*.

lishing of relations with outside agencies. There is hardly a state at present which has not a bureau of educational research eager to enlist the coöperation of schools large and small in the investigation and study of classroom problems. Universities and colleges are also desirous of securing the collaboration of principals, supervisors, and teachers. The influence of such connections radiates beyond the specific problems investigated. They do more than associate schools with research activities of other schools. They develop an appreciation of scientific procedure, suggest further problems for study, and flood the ordinary daily routine with new significance. When a supervisor directly associates individual teachers or a committee with a comprehensive piece of research, or interests an outside research organization in the solution of a local problem, he makes possible the introduction of ideas which both break down provincial barriers and relate practically to those elements in the situation peculiar to the specific community.

In the suggestions thus far enumerated we have not concerned ourselves with the administrative phases of supervision. A word must be said at this point, however, regarding a teacher's schedule, because it intimately concerns those aspects of professional worth which vitalize daily instruction. We cannot remain blind to the fact that this calls for an expenditure of energy; and one of the obligations of a supervisor is, therefore, to create conditions which will facilitate the wise conservation and expenditure of his teacher's energy. A teaching schedule or a teaching load which extracts the last ounce of vitality from a willing teacher need be persisted in but a few years in order to kill off creativeness and originality. No school system has the moral right thus to suck the lifeblood of its teachers. It is no less than a sacred obligation of school boards and executives and supervisory officers to guarantee to each teacher

the opportunity to lead a professional life. And it is to this guaranteed opportunity that we must look primarily for progress.

Important as salary may be, it is secondary in importance to a scheduled opportunity for growth. By and large we are passing out of that early stage of development in which teaching was a transitory activity. Taking the country as a whole, the teaching force is becoming more and more a permanent body and contains within itself an increasing number of people who will make of teaching a life occupation. A farsighted supervisory policy will build accordingly and create working conditions which encourage permanency. But the fruits of permanency are stagnation and rigidity and opposition to progress unless it signifies continued growth.

There is no denying that a policy of scheduling teachers so that they may have a margin of time for professional growth will require some readjustments and perhaps an increase in operating expenses. Perhaps it would result in a more scientific study of an equalized teaching load! But granted that a city which modified its teacher assignments with this purpose in mind would thereby add to the cost of education, we believe a statistician who could strike a balance of all factors involved would place the seal of his approval upon the policy. It would encourage teachers of outstanding merit to remain permanently in the system, and it would give a basis for expecting each teacher's performances to remain on a high level of originality and freshness. Finally, it would lead to a new and a constructive emphasis in the task of supervision. As against the present tendency to define rules and regulations and conditions of work in such a way as to restrain the many for the sake of the offending few, a supervisor could devote himself to the positive task of creating occasions for enlisting the voluntary productive activity of his teachers, an

activity which would of itself prevent that laxness which negative rules and regulations are designed to offset.

This, then, is the point of view which a supervisor can bring to his task. His peculiar opportunity is to exercise democratic leadership. In this capacity he must be capable of arousing enthusiasm for educational ideals; but the inspiration which he helps to generate will find an outlet in an effective organization of details.

But what concrete justification can be put forth as an encouragement of teacher participation in the organization and conduct of a school?

We should like to conclude with a brief mention of some beneficial results that will accrue to teachers, supervisors, and the curriculum from a more democratic school administration than now prevails generally.

If it be true — as we often piously state — that educational advance rests mainly upon vitalizing the work of the individual teacher, the expediency of extending greater self-determination to the rank and file should be measured first of all by its effect upon the teacher. And our answer here, in advance of actual demonstration, will doubtless vary with the extent of our faith in the tenets of democracy.

There is some basis for believing that the present lack of confidence in democracy does not follow from its actual failure, but from our inadequate conceptions of democracy. We can say of democracy what a learned bishop is said to have replied to the question: Has Christianity failed? His answer was that he did not see how it could be demonstrated, inasmuch as Christianity has never been tried!

So with the attempts at democratic supervision and administration; many have been defective expressions of democracy. Some have failed because their unwieldy character has generated a despair of actual accomplishment. They are cumbersome because they assume that democratic procedure is opposed to centralized machinery for

the execution of plans democratically formulated. They overlook the fact that differences in function require differentiation in control. There is nothing inherent in the idea of democracy which should cripple initiative. On the contrary, the impelling motive of democracy should be to provide situations in which each individual may realize the rich possibilities of his nature. Consequently, if our schools create conditions which enable teachers, as well as pupils, to develop and exercise their most effective powers, they will remain true to democratic ideals. The major considerations are (1) that no one serve merely as an instrument in the hands of another; (2) that each be afforded an opportunity to realize his personality through the organizing activity of his own capacity; and (3) that one perform his own specialized tasks with a full consciousness of their implications in the functions of others.

The exercise of initiative and originality depends for one thing upon avoiding slavish adherence to routine habits. Two essentials for keeping "out of the rut" are (1) contact with what others are thinking and doing; and (2) contact with the wider implications of one's work. It is for this reason that it becomes important for teachers to study their own problems in the light of what others are doing and thinking, with the distinct purpose of modifying the work of their own classrooms. Too frequently study groups conducted by superintendents and principals have failed because they provided no open channels to action. When teachers realize that methods of procedure and courses of study are objects of investigation for the purpose of modifying actual practice, the conditions for professional growth are provided and there is no great difficulty involved in enlisting their organizing powers.

Contact with the wider implications of a teacher's work can be had by permitting teachers to coöperate in formulating many details of procedure. No principal, supervisor,

or head of a department, who can sympathetically enter into the viewpoints of others and who thoroughly understands his function in the school, need hesitate to share his confidence with others. On the contrary, his task is frequently rendered easier when the requirements of and the justification for rules and regulations are widely understood and coöperatively arrived at. Not only are avenues of information opened up between his teachers and himself which enable him to perform his functions with less strain and a sounder understanding of the actual situation, but also teachers themselves will the more loyally and intelligently perform duties when they have had a voice in defining them. The loyalty of the individual to the larger organization—which is essential for its successful operation—thus becomes a matured responsibility and a genuine coöperation.

It is an interesting fact that what one does to assist the development of another frequently enriches the quality of his own nature. So with the relation of the supervisor to his teachers. The supervisor who establishes a frank relation of mutual coöperation with his teachers will thereby be rescued from the condition of lonely isolation which is so frequently the chief prerequisite of his office. How many superintendents and principals succeed in realizing a genuine membership in their communities? How many are unconscious of a reserve which bars them from a frank adult relation to younger people? How many are not shut off from real human contacts with their teachers because of a supposed difference between superior and inferior? Excluded from normal intercourse with people, engrossed so frequently with clerical duties and administrative details which take him from living situations, he only too commonly finds himself enmeshed in a system which slowly saps the vital springs of his life.

The establishment of democratic relations with his teachers will aid in his redemption. It will, moreover, lead of

necessity to an absorption in the more significant problems of the school. His task becomes at once that of creating plans for most effectively studying the conditions of his own school. His central position will enable him to see specific problems in their wider context and to coördinate the contributions of diverse departments. His contact with his teachers will enable him to secure that larger view which must supplement the more specialized information of the individual teacher.

An effective organization of the secondary-school curriculum will likewise be furthered by an attempt to democratize supervision. Educational literature of today is full of discussions regarding the objectives of secondary education. The objectives most generally agreed upon cut clearly across the subjects of the curriculum. The well-known seven cardinal objectives of secondary education call for the reorganization of the content of each subject as well as of the school system itself. This method of stating the purpose of education is promising, but its success depends upon an interlocking of subjects which can only be secured by a mutual interchange of views between teachers, as they prepare their courses of study. These interconnections are not secured *merely* when courses of study are written by experts, or *merely* when a principal urges teachers to correlate the work of diverse subjects, or *merely* when pupils study material which is rich in opportunities for correlation. They are realized only in a mobile situation. They are realized only when the objectives of one teacher are known to another, when each teacher senses his own subject as but one figure in a larger complicated design. The objectives of secondary education will remain abstract statement, incapable of impregnating the secondary schools until teachers can be encouraged (1) to translate the subject matter of their own specialties into these terms and (2) to pool their contributions with a view to the composition of

a joint product — a joint product which involves administrative procedure as well as classroom methods and subject matter.

But in the last analysis it is on behalf of the child that we must make our final plea for democratic supervision. He is the be-all and the end-all of our efforts, and the effects upon him of the environment we create is the test of our honesty and sincerity. We have fairly well abandoned that educational philosophy which contends that by oppression and suppression of all impulses a child learns to use wisely the relative freedom of adult life. We believe now that only as one learns painfully to exercise control will he practice control. Only as he lives in an environment that respects personality will a respect for personality develop. Consequently, we should strive to make our school environment consistent with the ideals we profess. If we are preparing our pupils to exercise the democratic functions of citizenship, we should organize our schools so that in very truth they become replicas of democratic life.

#### ADDITIONAL READINGS

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## Part II

# THE SUPERVISOR AND HIS TEACHERS



## CHAPTER VII

### THE SUPERVISOR AND THE LESSON PLAN

The lesson plan as an instrument or device in secondary-school supervision is relatively new. Indeed, there are still many teachers and principals who will contend that the one essential for successful teaching is a knowledge of subject matter. Preparation for teaching, as they view it, consists solely in "mastering the subject." True, when urged to grant the importance of a teacher's ability to adapt a subject to the age and condition of his pupils, they will concede the value of a "gift" for teaching, but for aught they can see this "gift" proceeds from the gods and not from a conscious study of methods of procedure.

As an antidote against a policy practiced even today in some training schools there is much to be said for this point of view. Frequently prospective teachers have "prepared" to teach the common branches by taking "methods" courses in subjects of which they were grossly ignorant. Fortunately, however, teachers are realizing increasingly that professional preparation calls for two essentials of approximately equal importance: (1) a rich and comprehensive knowledge of the subject one purposes to teach; and (2) a knowledge of and a practice in ways of organizing subjects with reference to the needs and the backgrounds of growing boys and girls. This professional training involves preparation in neither subject matter nor method as separate and independently existing elements, but rather a professionalized understanding and procedure which interrelates both. Obviously this calls for lesson planning.

When we trace the stages of development toward this realization of the importance of lesson planning, we find that it dates back in this country to little more than thirty years in elementary education, and probably to no more than fifteen years in secondary education. Lois Coffey Mossman's monograph on *Changing Conceptions Relative to the Planning of Lessons*<sup>1</sup> is the most complete study we have of the procedure followed in lesson planning since 1800. Rather significantly, it hardly refers to the high school.

Dr. Mossman finds that a general recognition of the importance of lesson planning as a part of a teacher's professional preparation dates from about 1890. Prior to this time planning was thought of as little more than the teacher's mastering the day's assignment in advance of his pupils. Only occasionally was it emphasized that preparation for teaching involves a consideration of the laws of learning. After 1860 the Pestalozzian emphasis upon questions pointed the way to advanced preparation for this exercise, but it does not appear that the Pestalozzians influenced widely the preparation of lesson plans either as a part of the curriculum in teacher-training institutions or in actual practice in school systems.

The year 1890 marks roughly the advent of Herbartianism. With this influence lesson planning assumed a position of central importance in teacher training and supervision. The assumption that the formal steps of instruction typify the way the mind works in the acquisition of new knowledge placed a premium upon teacher activity and teacher preparation for this activity. The apostles of Herbartianism began to transform both the theory and practice of pedagogy in this country. The National Herbart Society was organized at Denver in 1895 for "the aggressive discussion and spread of educational doctrine." The writ-

<sup>1</sup> Teachers College Contributions to Education, No. 147, New York, 1924.

ings of Herbart and such European Herbartians as W. Rein, Karl Lange, Gabril Compayré, Christian Ufer, and Gustaf Adolf Lindner were translated into English and began profoundly to modify conceptions of teaching and training for teaching. To these translations were added the writings of the members of the Herbart Society themselves. Particularly did the books of Charles and Frank McMurry tend to mold practice along Herbartian lines.<sup>2</sup>

According to the Americanized revision of the Herbartian scheme there are five "steps" in instruction that are universal. "No matter what the study be, whether Latin, mathematics, science, or some other, there is a certain order that the mind must follow in acquiring knowledge."<sup>3</sup> These steps are Preparation, Presentation, Comparison and Abstraction, Generalization, and Practical Application.<sup>4</sup>

The Herbartian lesson plan made one outstanding contribution to teaching procedure: it emphasized the need for planning instruction with reference to the characteristics of the learning process. Traditional procedure had contented itself quite largely with the hearing of lessons. The Herbartians insisted that new materials should be presented to pupils in accordance with what is known regarding their interests and backgrounds and established laws of learning.

But in this emphasis upon adapting instruction to the child, Herbartianism, as represented by the formal steps in teaching, sowed the seeds of its own destruction. Further observation of the way in which the mind works in acquir-

<sup>2</sup> McMurry, Charles, *How to Conduct the Recitation and the Principles Underlying Methods of Teaching*, 1890, published by H. Flannagan.

McMurry, Charles, *The Elements of General Method Based on the Principles of Herbart*.

McMurry, Charles and McMurry, Frank, *The Method of the Recitation*.

<sup>3</sup> *Ibid.*, p. 214.

<sup>4</sup> For an excellent and typical discussion of these steps cf. Bagley, William, *The Educative Process*, Chs. XIX, XX.

ing new knowledge has led to a questioning of these steps. Dewey's analysis of the thinking process reveals no such rigid and regular development as Clearness, Association, System and Method, or, according to the Americanized terminology, Preparation, Presentation, Comparison and Abstraction, Generalization, and Application. Moreover, a fuller appreciation of what is involved in apperception and interest works counter to mass instruction and an undue emphasis upon teacher activity.

Take, for example, what is implied in the new point of view regarding the beginnings of knowledge.

According to the Herbartian psychology the soul has no original content. Knowledge begins when the senses convey the "realities" to the soul upon which it may act and form presentations. The existence of what we today call original instincts or impulses is denied. The mind, under these circumstances, is its "content" and the type of individual one becomes depends entirely upon the experiences with which he is supplied. Thus, learning is conceived of primarily as a passive affair and what materials the teacher presents to the child and the way he presents them are of supreme importance.

Continued observation of the learning process, however, attributes more initiative to the child. Psychology now insists that the individual begins as a center of energy which seeks to incorporate within itself its environment. An impulse to act, not receptivity, thus characterizes the original nature of the child. Impulses lead to an ever-increasing number of contacts with the environment and, day by day, actions and reactions become more intricate and complex. The results of one experience modify later behavior and thus the individual grows, daily taking on new colors and forms, new substances and context by virtue of the integration of his impulses with his surroundings. When the implications of this psychology are followed out, there is



no less emphasis placed upon environmental factors than was stressed by the Herbartians, but the *activity of the child* becomes central.

This causes us to conceive of education as something more than instruction and the teacher becomes transformed into a guide and a director of the child's creative activity. Selection of the materials of education consists, according to this new view, in determining what pupil activities may be provided with a view to developing desirable attitudes, powers, and skills. Information serves as a necessary means for the formation of desirable traits, not as an end in itself. In short, we move from the formal steps of instruction into a much more flexible situation in which specific individual and group problems, projects, or units of understandings, and the like, replace the lock-step uniformity of the Herbartian lesson.

The same results follow from a fuller acquaintance with what is involved in the doctrines of apperception and interest.

Thus, the principle of apperception indicates that the teacher must relate new materials to old; present and future performance must build upon the past. But, obviously, in no two pupils is the apperceptive basis the same. Consequently a step in class instruction that is planned for the "class" will miss a considerable number of pupils. Adequate teaching procedure requires some way of individualizing presentations.

So, too, with interest. The psychology of interest has broadened to include the whole question of the development of attitudes and the influence of emotional factors in character development. To what was originally written on the psychology of interest we must now add the contributions of writers on mental hygiene and the findings of psychiatrists. These contributions emphasize the importance of the spirit and the atmosphere of the school in developing favorable or hostile attitudes toward school

work. Nor are spirit and atmosphere to be taken "generally." The manner of organizing the school tasks (whether, for example, in the form of projects or as daily lesson assignments) and the relative freedom or restriction upon free movements in working upon assigned tasks may determine the nature of the pupil's interest and the presence or absence of a sense of the general worth-whileness of school. Moreover, what we know of group psychology and the social character of learning bears directly upon interest. When classroom work enlists the social impulses as instruments in learning, interest is not only enhanced but instructional routine as well undergoes modification.

The modern doctrine of interest, in brief, calls for methods of teaching which contrast strikingly with those devised by the Herbartians. Mass instruction, lock-step methods of procedure, exaggerated teacher activity and comparatively passive pupil attitudes give way to a more vital teaching method which places a premium upon pupil activity and selects activities with reference to their function in the development of attitudes and dispositions. Daily lessons and daily assignments are supplanted by larger units of procedure, so that a pupil's daily work derives significance from its relation to a larger whole. This larger whole not only gives significance to each day's work but it also concedes to the pupil greater variability and freedom in working by virtue of his assuming a greater responsibility for his own learning.

A consistent application of the Herbartian doctrines of interest and apperception is thus found to be inconsistent with what has come to be known as the Herbartian method of instruction. Group instruction, in accordance with the "formal steps," conflicts with individual interests and experiences. A true Herbartianism calls for the abandonment of a uniform plan for a group of children. It stresses the fact that all children cannot move along at equal rates

and acquire equal amounts and similar degrees of learning in the five stages of Preparation, Presentation, Comparison and Abstraction, Generalization, and Application.

This point of view regarding the learning process has had its influence upon conceptions of lesson planning. Thus, Ralph Horn<sup>5</sup> finds that the lesson plan which supervisors commonly require of teachers in Ohio leaves considerable freedom to teachers and that steadily the requirement that teachers write out in detail the questions applicable to all phases of the teaching procedure is being abandoned.

Occasionally, however, the spirit of Herbartian method lingers after the form has disappeared. For example, the following form, intended for teachers in training, may not require a teacher to observe meticulously the Herbartian steps but it is just as rigid. Indeed, the ghosts of Preparation, Presentation, Comparison and Abstraction, Generalization, and Application are even traceable in it.

#### DAILY LESSON PLAN<sup>6</sup>

Class and Subject..... Teacher.....

1. Assignment of advance lesson .....Number of minutes.
  - (a) At beginning or close of period?
  - (b) Outline.
2. Review .....Number of minutes.
  - (a) Ground to be covered.
  - (b) Definite questions or outline.
  - (c) Distributed through the recitation, or all at one time?
3. The day's lesson .....Number of minutes.
  - (a) Purpose.
  - (b) Quizzing the preparation of pupils.
    - (1) Definite questions or outline.

<sup>5</sup> *Lesson Planning in Ohio Secondary Schools*. Unpublished thesis for the degree of Master of Arts, Ohio State University, 1930.

<sup>6</sup> Nutt, H. W., *The Supervision of Instruction*, p. 176. Used by permission of Houghton Mifflin Co.

- (c) Development of points that the study of the pupils was not expected to give.
  - (1) Outline.
  - (2) Devices.
- (d) Introduction of new or supplementary material.
  - (1) Outline.
- 4. Drill .....Number of minutes.
  - (a) Special points to be practiced.
  - (b) Devices.
  - (c) Materials.

Nor can we say that teacher-training institutions and supervisors trained in them, if Ohio be at all representative of the country at large, appreciate as yet the suggestive principles implicit in the doctrines of interest and apperception. Horn, in the study already referred to, finds that while lesson plans tend to provide for "units of learning" as a basis for planning, these units are still thought of as units of subject matter, rather than as adaptations, understandings, or skills in the learner. The dominant conceptions underlying lesson planning are still group instruction, and one plan for a class group in which it is assumed that the class can progress in daily segments foreseen by the teacher several days and, at times, a week in advance. "Efficient" supervisors, moreover, are commonly found who still require their teachers to hand in to the supervisor's office on Friday evening plans for each day's work of the succeeding week.

With the abandonment of the Herbartian procedure in teaching lesson-plan forms began to reflect other analyses of the teaching process. They have continued, however, to reproduce prevailing notions of stages in teaching. One or two forms used in teacher-training institutions will illustrate this point. The first of these is merely in outline form. The second is a lesson plan in detail.

## I

## LESSON PLAN

(Bowling Green, Ohio)

Subject

Unit

General Aim

Specific Aim

*Subject Matter**Procedure*

- |                      |                               |
|----------------------|-------------------------------|
| I. Review Outline    | I. Few good thought questions |
| II. Material Outline | II. Questions                 |
|                      | Devices                       |
|                      | Illustrations                 |
| III. Summary Outline | III. Questions                |
| IV. Assignment       |                               |

II<sup>1</sup>Subject: *English Literature*General Topic: *Modern Drama*

## I. Objectives

## A. Ultimate

Appreciation of the modern English drama as a unit in itself and as a link in the chain of English drama development.

## B. Immediate

Items of information relative to characteristics and tendencies of the modern English drama. Many of these items are implied in the learning exercises.

## II. Learning exercises

## A. Review

The teacher draws a long line across the blackboard and places the date 55 B.C. at one end and the date 1924 at the other end. A student is designated to fill in the dates needed to divide the line into the periods of English literature. A second student is

<sup>1</sup> Monroe, Walter S., *Directing Learning in the High School*, pp. 560-562.

designated to put in the important dates and facts that have been noted thus far in our study of the development of the English drama.

#### B. Recitation

Who will add a new date to our outline on the board? Student volunteers and puts 1890 with the name of Ibsen on the line.

The students are asked to give the lists of characteristics for the various tendencies of the modern drama as they have recorded them on their outlines.

Sufficient repetitions are made to be sure that these are definitely enough in mind to insure intelligent discussions during the next few days.

The teacher calls for volunteers to name movies they have attended and to prove their tendencies by reference to these characteristics.

Several students have read *The Servant in the House* for outside reading. We have read *Hamlet* in class. A brief contrast of the themes, characters, memory lines, and plots of these plays brings out the differences between the modern and older dramas. As a summary the teacher gives rapidly a list of drama characteristics and asks students to name the tendencies back of these and plays to illustrate them.

#### C. Assignment

Read the play, *The Family's Pride*, Text: pp. 321-25. Have you read or seen any other play by Gibson? Miss Rich has many plays to choose from. Why did she choose just this play for her text? Which tendency of the modern drama predominates in this play? Prove your answer. Make a definite statement of the theme of the play. Make a study of the dramatic situation. Is the one-act form fitted to the theme and tendency of this play? Give reasons for your answer.

Supervisors and school administrators occasionally find the lesson plan a convenient means for checking a teacher's preparation. The feeling that perhaps teachers will not plan their work conscientiously unless checked up seems to lie behind the requirement that lesson plans be filed in the supervisor's office in advance of teaching. Similarly, the policy that some supervisors follow of requiring that a teacher submit his lesson plans in advance of the supervisor's visit would seem designed to serve as a convenient instrument for assisting the supervisor to appraise the teacher's work.

E. E. Morley describes in the *Educational Research Bulletin*<sup>8</sup> of Ohio State University a plan of this character:

Each week the principal prepares a schedule of visits to be made during the following week. Teachers to be visited prepare rather elaborate plans for these recitations in order to furnish the principal with information concerning the progress of the group, the plan of assigning work, the purpose of the lesson, and the success of the teacher in executing her plan. These plans are turned in several days in advance of the recitation. (See form appended.) Following each visit, the principal prepares in duplicate a report of the lesson, one copy of which is given to the teacher, and the other filed. (See form appended.) During conference, both teacher and principal hold a copy of the report.

The writer has found that the stimulus furnished by prepared classroom visits justifies the practice of letting teachers know in advance when visits are to be made. Such practice minimizes the inspectional character of visitation, and definitely establishes the sincerity of the principal's motive to improve instruction. Furthermore, since recitations carried on under these conditions are nearly always good, the principal invariably finds something to commend, and thereby further strengthens the confidence of his teachers. Thus, instruction is brought to a higher level and a cumulative enthusiasm for better teaching is established.

<sup>8</sup> Volume III (September 17, 1924), pp. 239-240.

## LESSON PLAN

Lesson plan to be prepared for the principal in preparation for his visit on the date indicated below.

Please fill in and return to the office at your earliest convenience.

Teacher ..... Grade and Subject .....

Date ..... Period ..... Room .....

Purpose of this lesson. (Be specific.)

Materials, references, devices, etc., to be used.

How I propose to develop this lesson in order to accomplish its purpose. (State clearly your procedure.)

How I am going to test my results.

How I am going to insure the permanence of learning accomplished. (State kind of drill or review to be used.)

Assignment of the next unit of work. (Make assignments clear so that every pupil will understand what he is to do.)

## REPORT OF CLASSROOM VISIT BY THE PRINCIPAL

Teacher ..... Grade ..... Subject .....

Date ..... Period ..... Room .....

A. Comment (Items unchecked are satisfactory, those checked need attention.)

1. Physical condition of the room
2. Lesson plan
3. Pupil's preparation and response
4. Teacher's directing study
5. Routine of classroom, procedure
6. Execution of plan
7. Teacher's manner and classroom personality

B. Suggestions

.....  
Principal



In the West Technical High School of Cleveland, Ohio, the following plan is used in connection with the "announced" visit.

-----  
I expect to visit your ----- class ----- period -----

Please fill out the following blank and return to the office at your earliest convenience.

Assignment you have made for the lesson.

Aim or objective of the lesson.

State clearly the manner in which you propose to develop the lesson and accomplish your aim or objective.

How are you going to test your results?

How are you going to insure the permanence of the learning accomplished?

Assignment for next lesson.

On the other hand, one finds that lesson plans in practice are commonly no more than class assignments which a teacher records so that in the event of illness or enforced absence a substitute teacher will know for what work pupils are to be held responsible. This seems to be the chief function of the two following outlines.

## I

### TEACHERS' WEEKLY LESSON PLANS (McKinley High School, Canton, Ohio)

Room ----- Date ----- Teacher -----

*Subject*

Monday

Tuesday

Wednesday

Thursday

Friday

*Subject*

Monday  
 Tuesday  
 Wednesday  
 Thursday  
 Friday

*Subject*

Monday  
 Tuesday  
 Wednesday  
 Thursday  
 Friday

*Subject*

Monday  
 Tuesday  
 Wednesday  
 Thursday  
 Friday

## II

LESSON PLANS  
 (Marion, Ohio)

Subject.....

Teacher .....

Monday

Monday

Tuesday

Tuesday

Wednesday

Wednesday

Thursday

Thursday

Friday

Friday

---

These illustrations of the varied use of lesson planning should at least establish the point that lesson plans are pivotal elements in supervision, and the attitude which the supervisor assumes toward lesson planning determines to a considerable extent the character of his supervision. For this reason we shall now consider the relation of the supervisor to lesson planning.

As we have already indicated, many schools still require that teachers supply their supervisors with lesson plans of a pattern character. The convenience of the supervisor thus tends to take precedence over the needs of teaching. For, while it is conceivable that an administrator or a supervisor can block out his work in terms of days and hours and minutes, the learning processes of pupils cannot be so neatly ordered. It is only under the old type of teaching and the hearing of lessons that a teacher can plan work in daily segments. In genuine learning the teacher concentrates upon specific learning products rather than upon specific time blocks. His concern is with the individual mastery of certain understandings, skills, and powers. These objectives depend for their realization upon careful planning, but seldom do they coincide with the arbitrary divisions of a day into periods; and the teacher who centers upon the daily allotments of time rather than upon the pupil activities requisite for progress in learning is in danger of ignoring both individual differences in pupils and the essentials of his task.

This does not mean that a teacher will neglect to fill each day with worth-while activities. It is altogether a matter of perspective. When the semester's work is looked at as a whole and is then broken up into appropriate divisions, and these divisions, as learning products, are planned for in detail, each day will take care of itself. On some days all pupils may be together as a group. At other times, they may be working as individuals. Always the stage of the learning development will determine the nature of the activity.

A supervisor must, of course, assure himself that his teachers are planning their work effectively. This requires that he himself possess a clear conception of the outstanding essentials in teaching. Consequently, before discussing what the supervisor should insist upon in the way of lesson planning it may be well to ask: What are the first essentials in lesson planning?

An answer may be had from an outline of ways in which a supervisor can assist inexperienced teachers to plan their teaching.

In the first place the inexperienced teacher requires help in sensing the difference between knowledge of a subject as such and knowledge of a subject for teaching purposes.

A thorough grounding in subject matter will always remain an indispensable preparation for good teaching, but the level of interest and content peculiar to an advanced course in college is not directly relevant to secondary-school instruction. The scholarly young teacher "well grounded in his subject" has frequently to master his subject from a new point of view when he begins teaching in the secondary school. Aspects which were perhaps only taken for granted in his previous study now require special emphasis. Material that was completely ignored in his college courses now becomes of first importance.

E. W. Pahlow puts this difference in conception of subject matter neatly in the following statement:

Of course, teachers should know their subject, but how? For what purpose? The average American college teacher does not and probably could not teach his course on the level of a Harvard or a University of Berlin seminar. Why should he? He is not conducting a seminar; he is teaching on the undergraduate level, and he knows his subject, at least in most of its phases, only on that level; in other words, he knows it in terms of college undergraduates. Well, the high-school teacher is teaching on the high-school level—a level further removed, especially in its lower ranges, from the college than the college level is from the seminar—and that is the level on which he needs to know his subject. This does not mean that he need not know more than the high-school graduate; he ought, of course, to know what history on the college level is like, just as the college teacher ought to know what history on the seminar level is like. But, whatever else he knows, he must know his subject in a manner to meet the comprehension of high-school pupils. This involves an acquaintance with and an appreciation of a wealth of literature in prose and verse and a wealth of illustrative material—maps, charts, and graphs, pictures and models—much of which is never heard of in the college classroom and some of which probably would not be tolerated there.<sup>9</sup>

What Pahlöw says of history is equally true of other subjects. How different, for example, is the content material of literature appropriate for adolescents from the reading lists in an advanced college course in literary criticism! Consequently, it is a first obligation of the supervisor to assist inexperienced teachers to a realization of what is involved in translating subject matter into the form and the content adequate and appropriate for secondary-school teaching.

This calls for a practicable and a workable knowledge of the psychology of adolescence and an intimate acquaintance with working resources within subject-matter fields. But it also imposes special obligations upon a supervisor. He

<sup>9</sup> "The New History Teaching," the *Standard*, XII (December, 1925), p. 104.

must assist his new and inexperienced teachers to become acquainted with school and community resources that constitute appropriate grist for their mills. .

It is likewise the supervisor's duty to supply his teachers with necessary materials of instruction. When school work is conceived of as activities in which pupils engage — not merely information they are to acquire docilely — instructional materials take on a vital significance. Supplementary books in history, a wide variety of readings in literature, apparatus and equipment for science, mathematics, and so forth, become more than "supplementary" in the sense of secondary in importance. They are basic raw materials.

Traditional adherence to one book and meager reference materials is still common because supervisors do not sense the central importance of such items. It is not unusual to find schools that, although boasting of modern features, still cabin, crib, and confine classroom work because of inadequate learning instrumentalities. Such a condition is the direct responsibility of the supervisor. It is his business to convince his community and his immediate superiors of the central needs of the school. The theory of teaching which he lives up to will determine what boards of education will supply. The average business man who sits upon a board of education is readily disposed, as a result of his own unfortunate school experiences, to favor such objectives in literature as a genuine taste for reading developed out of wide reading as against a translation method of English teaching, the growth of an ability to think historically as against the memorization of one textbook, and the establishment of an acquaintance with the applications of science as against a verbal knowledge of scientific principles. A supervisor who takes this business man into his confidence and urges the importance of developing attitudes and powers and abilities in contrast with mere information is likely to secure both a ready convert and an earnest

backer for the purchase of the tools essential for these purposes. The responsibility for the present false emphasis in education, with its huge expenditures upon outer accoutrements and its false economy in books and supplies, lies directly at the door of supervisors. It is their duty to center attention upon what is central in learning.

Assisting teachers to appreciate the difference between subject matter as such and subject matter organized with reference to teaching needs includes a bird's-eye view of a course prior to introducing pupils to it. This bird's-eye view requires rather clean-cut conceptions of what the course or the subject is to do for the pupil. A suggested approach is the organization of a subject in terms of learning units. Good teachers of science, mathematics, history, English, and foreign languages are interested in more than having pupils cover a prescribed amount of ground. Their eyes are upon certain intellectual products which are to be the outcome of a pupil's work. These learning products are a teacher's true objectives. They should be known; and the test of their being known is their translation into the pupil activities which are most likely to realize them.

A history course, for example, becomes more than so many pages in a required text and second year mathematics something different from studying "through quadratics." The desirable outcomes of a history course quite properly include a knowledge about some very definite developments in civilization, but they consist equally of the acquisition of certain methods of procedure and such abilities as, for example, the making of summaries and outlines, a knowledge of some characteristic ways of human behavior, an understanding of the conditions which give rise to them, the habit of framing an hypothesis and seeking its verification, the disposition, when formulating an opinion regarding some contemporary issue, to hold to this opinion in a tentative and open-minded manner. In short, adequate

planning for a history course involves setting the stage for action and providing ways of acting which will lead to desirable character traits. The goals of history teaching are habits and dispositions and skills, as well as information.

To accomplish these ends a teacher must plan very carefully with both his objectives and his pupils in mind. Moreover, in many things, he should share his confidence with his pupils. Before they set out on their journey, he should furnish them with a map of the proposed trip. Planning will thus provide conscientiously for developing in pupils a realizing sense of the significance of what they are about to do. Sometimes this may be merely a bird's-eye view with an introduction to the suggestive and interesting problems that call for solution. At other times, preceding a particularly arduous and dreary tramp, it will indicate the bearing this has upon what has preceded or lies before. At all events, adequate preparation requires that the teacher give pupils an appreciation of the significance of present tasks, for the reason that learning takes place best when present activity is consciously related to a larger context.

The teacher who plans his work carefully is conscious of different stages of learning and procedures appropriate for each stage. A supervisor can do much to assist beginning teachers to appreciate characteristic peculiarities of each stage. In training schools or school systems where cadet teaching is carried on, a preliminary period of observation and planning prior to actual teaching and gradual participation in teaching will help teachers to appreciate the significant aspects of each stage. We have already referred to the introductory period in which pupils are given a bird's-eye view or an over-view of what lies before, with the purpose of suggesting interesting problems or developing a sense of the significance of work to be done. Planning for this period may be designated as planning for the assignment period. It is obviously different from planning for



the second phase, in which pupils may work best as individuals proceeding at their own rate and with peculiar reference to their abilities and interests; at this stage provision must be made for checking and appraising pupil progress. Those pupils who excel in quality of work or speed, as well as those who stand out as problems because of slowness or special learning difficulties, will require appropriate treatment. Thus, the capable pupil may be asked to help a backward comrade, to engage upon a supplementary project either alone or with others, or perhaps to ascend to a higher level of accuracy and thoroughness. Still a third stage is that of group discussion or activity in which common needs or interests are given attention during a working period, such as drilling upon common difficulties, discussing a problem that grows out of work thus far accomplished, or in which teacher and pupils deliberately center upon organizing material learned so that it will function in the solution of present or future problems.

We cannot amplify, as we should like to do at this point, upon the distinctive phases of teaching.<sup>10</sup> Our purpose here is merely to emphasize the fact that the teaching situation includes these distinctive steps. Preparation in the way of planning for pupil activity is thus essential at each stage of the process; but it is also true that the experienced and wise teacher always provides for a flexible and a changing situation in which pupils are dealt with as individuals who nevertheless share in certain group activities.

Most discussions of lesson plans emphasize the importance of the question and the necessity for a careful preparation on the part of the teacher for the questions he will ask. For a young and inexperienced teacher this preliminary survey of questions is valuable because it is one with the organization of a subject for teaching purposes. The ques-

<sup>10</sup> For a more complete discussion of characteristic stages in teaching cf. Thayer, V. T., *The Passing of the Recitation*, Chs. XVIII-XXI.

tions a teacher will raise regarding the Industrial Revolution, for example, will reveal not only the degree to which he understands the significant developments of this period but also his facility in relating these developments to the background and interests of his pupils. Supervisors who do no more than inform teachers that they talk too much or ask too many questions within a given period of time do not help their teachers to penetrate to the heart of their difficulty. A torrent of questions raises the suspicion of lack of perspective and the absence of a sense of the important on the part of the questioner. Consequently teachers who ask too many questions require help in organizing their subjects and in distinguishing the important from the unimportant. A constructive approach to such a teacher's difficulties may well be found in helping him to see the different steps in teaching referred to above.

A teacher who experiences difficulty in the use of questions will also receive help from such discussions as Colvin's on "The Question as a Method of Instruction."<sup>11</sup> In this chapter Professor Colvin describes the functions of questions, distinguishing between the three purposes of testing knowledge, making emphatic facts already known, and stimulating thought, with suggestions and ample illustrations for acquiring a technique appropriate to each function. Our own approach is somewhat different. It recognizes the function questions will perform at each stage in the teaching process. When pupils are about to study a new subject or to undertake a new division of work, the question should serve to reveal to the teacher the preparation and background of the class. It is here that the "new type" of examination questions will on occasion be of help, because they enable the teacher not only to test the class as a whole with an economy of time and effort but also to secure an insight into the status of each individ-

<sup>11</sup> *An Introduction to High School Teaching*, Ch. XV.

ual. Vocabulary needs, past preparation, out-of-school information and experiences which relate to the work in hand can be brought to light in this way.

This, however, is primarily to orient the teacher. A further step, by means of oral questions and his own discussion, is to introduce the pupils to the work about to be undertaken. Questions asked at this stage serve to reveal in an attractive light the problems which lie before. Later will follow questions addressed to the class as a whole and to individuals, which will cause pupils directly to relate classroom work to their experiences and special interests. A stimulating question of this character, which suggests a supplementary project or an individual attack upon a class problem, is provocative of creative thinking. Consequently, the teacher who propounds it must understand his pupils and stand ready to supply further suggestions and creative opportunities for its solution.

Following the period of class study and individual projects will come questions designed to test the adequateness of data gathered. These are fact questions. It is also a time for questions which aim to clinch a point or set in relief some truth of importance. They are not sufficient unto themselves, however. They should be supplemented by thought-provoking questions which will stimulate the pupil to undertake new and profitable adventures.

Finally, there is the organizing question, which requires a pupil to look back upon the route traversed and to survey some of his accomplishments. Such questions will require him to take the information acquired from his study and organize it in such a way that it will function in his own life. This procedure is a final test of mastery, and questions which lead to it will relate school information to situations out of school. Thus will much that was common in the eyes of the student take on an uncommon light and his education in actuality lead to the transformation of his life.

This is a very condensed summary of some of the chief purposes which questions serve in teaching. We have endeavored to indicate that these purposes are varied and take their character from specific stages in teaching. At all stages questions are critical and central, and the test of their effectiveness is what they lead the pupil to do. They are possible pivots upon which a pupil's education turns and, consequently, they cannot be planned for too carefully.

But neither can they be stereotyped and formal! The essential thing is not their formal phrasing but rather a realization of their purpose and the objectives which they reveal. For one purpose they may be mimeographed and given to pupils as guides to study; at other times they will be oral and spontaneous. The main lines of procedure being carefully determined upon, the character of the questions will take care of itself.<sup>13</sup>

A further essential in planning in which young teachers require help is to see the work of the classroom in its relation to the out-of-school life of the pupil. These two phases of life should not be water-tight compartments. In the past the character of the materials of secondary schooling

<sup>13</sup> We have heard much about the Socratic question and its thought-provoking character. Frequently teachers are credited with developing thinking when by means of Socratic questions a class recitation leads to a class conclusion. However, it is not uncommon for teachers to be credited with skill in questioning when careful observation will reveal that the conclusions arrived at are patch-work results, Johnny having contributed one portion, Mary another, and James still another. Taken as a whole, certain new truths seem to have emerged, but the thinking in actual evidence is that of the observer or perhaps the teacher who puts all these together. The individual minds of the pupils contain only confusion. No one pupil has thought clearly or consecutively. The Socratic question has functioned as it functioned in Plato's dialogues, where, we must remember, it is the bystanders and Socrates who seem to make progress in thinking, not the unfortunate victims of Socrates' questions. Thinking takes time and is individual and the teacher who plans thought questions must adapt his procedure accordingly.

has tended only too commonly to divorce a pupil from life. Applications of school work were not consciously sought. Today we emphasize that a school should train for citizenship and we aim to socialize the subject matter of secondary curricula, but our overcrowded schools, our departmentalized teaching, and our general drift towards specialization lead to a divided responsibility for the welfare of the pupil to such a degree that not only are the home and the school ignorant of the influences each exerts but teachers within the school who are responsible for the pupil's progress also fail to interrelate their efforts. These facts call for personnel officers whose duty it is to study the child, to seek to understand him as a whole, and to weave the forces operating upon him into some form of unity. But in addition it becomes necessary that the teacher introduce him to new materials in such a way that they will function as organizing instruments for the understanding and control of his environment.

This involves a method of approach different from the traditional. It is one contribution of the project method that it takes as its subject matter a living situation or a concrete problem with an immediate appeal. Projects may well afford a splendid opportunity for teaching principles in their social context, but too frequently the educational opportunities of the project are neglected. What we are arguing for here does not depend for its realization upon project teaching alone. It will be realized when a teacher asks himself: What bearing has this material upon the lives of my pupils? How can I introduce them to it, or have them work with it so that its relation to their own lives or the lives of others will be appreciated? What phases of my pupils' environment embody these facts or principles, and how can I put them to work so as to lead them to see their environment in a new light?

At times the answer to these questions will be found

best by engaging upon a project, but, if so, the teacher's purpose in the project is primarily to draw out of it the new meanings to which we have referred. Whether or not the project is educational and thus worth while will be tested by these outcomes. At other times the social insight will come from class discussions of common material covered, and again this keener appreciation will grow out of a personal conversation with a pupil or supplementary work assigned to him for the specific purpose of relating class work more intimately to his own needs. Still again, it will come by organizing the course in such a way that the understanding of the principles of science, or mathematics, or literature, and the like will come as new knowledge out of a study of what has heretofore been common and ordinary experience. In all cases the essential point is that a teacher's plan for individual work and class work should be made with the conscious purpose of developing his subject in its social context. When a teacher plans specifically and definitely to effect this transfer of learning, he will have continued assurance that his teaching is leading to an ever-widening pupil horizon and a genuine integration of school experience with the main stream of pupil activities.

When the possibilities of teaching school materials in their social context are fully exploited, we shall have a revolution in both subject matter and method. It will doubtless call for a capitalizing of the social impulses and the elimination of the chasm between classroom work and extra-curricular activities that is now common. But in the transition period between the insulated character of much of present-day teaching and the extreme limits of the revolution there is opportunity for teachers to proceed conservatively and to adapt gradually their teaching to the need of unifying the lives of their pupils. And thus will they enable the subjects of secondary education to become in reality methods of thinking, so that as a result

of training in science, mathematics, history, and literature, language, and the arts the pupil will grow into a fruitful and dynamic relation with his world.

In addition to what have been mentioned as essentials in planning, we should call attention to specific provisions for what seem to be the peculiar and unique difficulties and problems of the class. What these problems and difficulties are will vary with class and with teacher. They cannot be ignored, for progress depends upon pupils and teachers facing them frankly. It is for this reason that planning "in general" means very little. One must plan for specific pupils or a specific group of pupils. Likewise, a teacher's weakness is something individual and, when sensed, that becomes the essential element in planning. In teachers with little experience the following problems are characteristic: difficulty in discipline, inability to imagine what will happen in the way of pupil reaction, difficulty in utilizing time economically, difficulty in relating aims and methods, difficulty in questioning skillfully and effectively.<sup>13</sup> As we have already indicated, some of these difficulties are best met by an indirect attack. Pupils who have something to do that appears to them as inherently worth while are not disciplinary problems, and consequently problems of discipline are often best solved by organizing class work more effectively. But at the time, when these problems are central problems, they should be the immediate items of attention in planning lessons, and that supervisor will be most helpful who succeeds in having his teachers diagnose their difficulties and center efforts upon their removal.

This brings us to the practical question, What shall be the supervisor's relation to lesson planning?

Too frequently regulations regarding lesson plans serve no other function than to conceal a principal's or a super-

<sup>13</sup> Colvin, S. S., "The Most Common Faults of Beginning High-School Teachers," *School and Society*, VII, p. 451.

visor's consciousness of ineffectiveness. Being aware of his inability to appraise adequately the quality of his teachers' work, or seeking to conceal his own lack of knowledge of the subject or his incapacity to teach it, he finds in the lesson plan a device for assuring himself that his teachers are preparing their work. Consequently, he issues orders that lesson plans be molded according to a prescribed pattern and be submitted to him regularly for his inspection. The result is either an unnecessary burden imposed upon his teachers, or a tendency on their part to adopt stereotyped methods of preparation for their teaching.

Other supervisors of a conscientious bent see in uniform lesson plans a way of automatically assuring adequate teaching. They aim to secure vital teaching by attending to the mechanics of supervision. They, too, devise forms for lesson plans which teachers must use as a basis for their preparation and to which they must rigidly adhere in their teaching. Thus, lesson plans become merely one phase of an external type of supervision.

A more vital method of procedure would seem to be to relate lesson planning to the personal needs of teachers. The supervisor who works with his teachers in the way we have suggested in Chapter VI requires no formal lesson plans to acquaint him with the quality of their work. Indeed, the formal lesson plan may fail to reveal the point at which assistance is needed. A supervisor should see that lesson planning relates to those elements in a teacher's work in which the latter experiences difficulty. A teacher must prepare for all phases of his teaching, to be sure, but where he needs most particularly to prepare and to plan is with reference to the place in which he is having trouble. Attention to lesson planning is thus identified with coping with real difficulties. Emphasis should thus shift from lesson planning in general to lesson planning in particular. When the relation between the supervisor and teacher is



cordial and genuine, a teacher will welcome the supervisor's assistance in lesson planning of this character, for it is help where help is needed. The tactful supervisor will thus emphasize careful study of ways to remedy or avoid the specific evils which operate in the situation.

Let us suppose a teacher is facing disciplinary difficulties. A keen supervisor may see that the trouble lies not with naturally depraved pupils nor with the absence of a lesson plan as such but, perhaps, in a failure to organize the subject so that the pupils sense its importance or are kept fruitfully busy upon it. Such a supervisor will set the teacher upon the task of reorganizing his work so as to secure more effective results. This may call for a reconstruction of his teaching procedure, or more adequate provision for individual differences, or a more intimate acquaintance with the subject he is teaching. Whatever the cause, it must be ascertained and remedied. Its discovery and cure may constitute the heart of lesson planning.

The same is true with the successful teacher who wishes to try an experiment or a new method. This requires careful planning and procedure, but, again, the lesson planning with which the supervisor is concerned relates to those phases of the teacher's problem which are critical and most significant. His function is to advise and assist where he can be of most help.

Lesson planning is thus quite different from a supervisory device whereby the supervisor *in absentia* assures himself that his teachers are preparing their work. The effectiveness of their teaching, the adequateness of their plans, can be otherwise determined.

We would thus distinguish between lesson plans and records of assignments or work being done which a teacher makes for the purposes of the administrator. Teachers fall ill and substitutes must be secured, and occasionally it becomes necessary for someone besides the class to know

what is the day's assignment. The needs for such records will vary with the type of teaching followed. The more closely textbooks are adhered to and the old type of recitation used, the more important it will be for someone besides the pupils to know the daily assignment. Since the purpose of these records is to provide for an emergency, this purpose should regulate their character. Consequently, they should be as brief and as conveniently filled out as possible. In no way should they impose unduly upon a teacher's time and energy. They are not a part of professional preparation. When work is organized according to larger units of work, this type of record is less necessary.

Planning to teach is a professional activity and the methods one adopts in preparation for it are rightly peculiar to himself. Teaching outcomes alone are of public concern. A supervisor may suggest ways of keeping notes and the like which he has found economical and helpful, and most teachers who respect their supervisor as a master craftsman will welcome such suggestions and information. This, however, is quite different from insisting that each teacher fill out each week in advance a stereotyped lesson form indicating in detail daily treatments of subject matter and method.

In lesson planning the letter of the law killeth, but the spirit leadeth to everlasting life.

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## CHAPTER VIII

### TEACHER RATING AS AN INSTRUMENT IN SUPERVISION<sup>1</sup>

Estimating the worth of a teacher is a problem which involves both the supervisor and the administrator. Consequently, a complete discussion of teacher rating should dwell upon the implications for both. Since in this chapter, however, we are concerned primarily with the problem from the standpoint of supervision, our discussion will confine itself chiefly to an attempt to determine the function of teacher-rating scales in a program of constructive supervision.

This does not mean that we shall avoid administrative aspects of the problem when the two interrelate. It merely means that we assume the effects of teacher-rating scales upon the supervisor-teacher relation are more important than any administrative advantages which may follow from their introduction. As stated in one circular of information on a rating plan, "The fundamental purpose of the rating scale is to serve as a means for improving the quality of teaching."<sup>2</sup> To the extent that this purpose is realized teacher rating justifies itself or it fails.

The motive for introducing teacher-rating schemes is clear. It is to substitute an objective and accurate appraisal of teaching success for the old method of general impres-

<sup>1</sup> This chapter, with some additions and revisions, is reprinted from *Educational Administration and Supervision*, XII (September, 1925), pp. 361-378.

<sup>2</sup> "Circular of Information: A Rating Plan for Teachers." The Board of Public Education, Office of the Superintendent of Schools, Philadelphia, Pennsylvania, May 15, 1922, p. 5.

sions. As Monroe and Clark state in their monograph on *Measuring Teacher Efficiency*:

Until recently teachers were rated by what has been called the "general impression method." Under this method the judgments of a supervisor were controlled neither by an outline nor by other specifications. Obviously different supervisors would vary widely in the judgments expressed with reference to the same teacher. Furthermore, a given supervisor was likely to judge different teachers on different bases or to be influenced by some minor detail either favorable or unfavorable. For obvious reasons this method of measuring the efficiency of individual teachers is unsatisfactory. Beginning about 1910, a number of investigators attempted to devise procedures that would yield measurements of teaching efficiency which had a definite meaning and were more accurate than could be obtained by the "general impression method."<sup>3</sup>

This being the case, the proposals for rating teachers must be judged in part according to their success in achieving objectivity and accuracy in results. Before investigating this problem, however, let us secure a general view of the characteristics of rating scales.

Teacher-rating plans are of three general types: score cards of teacher traits, man-to-man comparison scales, and measurements of teacher efficiency based upon achievements.

The score card was the earliest method used and is still probably the most widely followed plan of rating teachers.<sup>4</sup> It consists of a number of traits considered essential in teaching, arranged in such a way that they can be appraised separately.

Boyce's scale, for example, includes 45 traits, Landsittel's 34, and Maddock's only 8. Usually the score card provides for a maximum or a minimum number of points

<sup>3</sup> *Educational Research Circular*, No. 25, Bureau of Educational Research, College of Education, University of Illinois, January 28, 1924.

<sup>4</sup> For a brief survey of the various score cards put forth by investigators, see: Monroe and Clark, *op. cit.*, pp. 3-8.

which can be credited to any one general trait, such as "discipline" or "personality" or "teaching method," but enables a rater to designate the worth of minor traits which are elements in these general traits. Thus, in Landsittel's score card, "Method" is accorded 205 points on a perfect total score of 1000, but "Selection and Organization of Subject Matter," which is a special ability considered subordinate to the more general trait "Method," will constitute no more than 45 points out of the 205. The total score constitutes the supervisor's estimate of the teacher's efficiency.

In the practical applications of rating scales there has developed a tendency to abbreviate, and even to abandon, numerical ratings. Thus, Philadelphia introduced in 1922 a rating plan for teachers which consisted of three main divisions, *instruction*, *management*, and *coöperation and professional attitude*. The directions to supervisors state, "The personality of the teacher is to be considered merely as it functions in *instruction*, *management*, and *coöperation*, and is not to be regarded as a separate element in rating." The weights assigned the three major headings are: instruction, 50, management, 30, and coöperation and professional attitude, 20. In the assignment of these values no attempt is made to appraise the subheadings independently. The circular of information regarding the plan states: "The measurement of separate elements included in the analysis is not intended to extend beyond the three main headings just mentioned. The subheadings are items of varying importance, but are not in any case to be given separate numerical values."

A further development in the use of the score card is revealed in the modifications of the Philadelphia plan after two years' use. In 1922 the instructions provide that "Numerical ratings are to be given for candidates for Class B of the salary schedule in the case of elementary and junior-high-school teachers, teachers on probationary

appointment, teachers who are candidates for higher positions, teachers who have gone from one type of position to another, all teachers rated unsatisfactory and teachers who withdraw from service." Evidently for other teachers numerical ratings were not to be used. In 1924, following recommendations of the Council of Delegates of the Philadelphia School Council, the rigorousness of the rating was further reduced. The superintendent of schools expressed himself as being in favor of a literal rating in place of a numerical rating and, where possible, he favored the use of S for satisfactory and U for unsatisfactory. Moreover, in cases where a closer grading is required by law and yet a literal grading will accomplish this same end, he favored the use of the letters E (excellent), G (good), and so on, for this purpose.

This modification in the direction of greater latitude and indefiniteness in grading is of interest in connection with the fact that one of the chief purposes of a rating plan is professed to be that of enabling supervisor and teacher better to analyze the teaching process.

In 1917 Walter Dill Scott devised the man-to-man comparative scale for the purpose of rating employees in industry. Scott and others in 1917 introduced this into the Army for the rating of officers, and Rugg<sup>5</sup> has worked out a very complete man-to-man scale to be used by teachers for their self-improvement or by supervisors for estimating the worth of teachers. Such a scale consists of certain rubrics of qualities, such as skill in teaching, skill in mechanics of managing a class, teamwork qualities, qualities of growth and keeping up-to-date, personal and social qualities. These qualities on a man-to-man comparison scale may be identical with those on a score card, but in pro-

<sup>5</sup> Rugg, H. O., "Self-Improvement of Teachers through Self-Rating: A New Scale of Rating Teachers' Efficiency," *Elementary School Journal*, XX (May, 1920), pp. 670-684.

ceeding with this scale the person who uses it selects definite individuals to represent each characteristic rating. Thus, he will take skill in teaching and select five teachers who typify respectively: "(1) 'the best teacher ever known,' (2) 'better than average teacher,' (3) 'average teacher,' (4) 'poorer than average teacher,' and (5) 'the poorest teacher ever known.' It is recommended that these five teachers be selected in the following order: 'best,' 'poorest,' 'average,' 'better than average,' 'poorer than average.'" <sup>6</sup> A separate scale is thus made for each rubric of qualities and each rubric is considered separately in rating teachers. Score values are assigned the teachers represented on the scale and the teacher being rated is assigned his value by comparing him with the scale teacher. The total rating of a teacher on all rubrics of qualities constitutes his total score.

Brueckner,<sup>7</sup> Courtis, and others have recently devised modifications of the man-to-man scales. These scales substitute descriptions of teaching performance for actual individuals. Thus, in rating method and skill in the teaching of geography, the scales "consist of four sets of descriptions of nine lessons each in geography, arranged from best to poorest in the order and skill exhibited by the teacher." In using the scales the observer first identifies the method used by the teacher by reference to carefully prepared definitions, and, secondly, "rates the lesson as to skill by comparing the quality of the work in the lesson with the various descriptions of lessons in the scale, much as is now done in rating compositions of handwriting."

<sup>6</sup> Quoted from Monroe and Clark, *op. cit.*, p. 10.

<sup>7</sup> "Educational Supervision," First Yearbook, National Conference on Educational Method, Teachers College, New York, 1928, pp. 176-196; "Scientific Method in Supervision," Second Yearbook, National Conference of Supervisors and Directors of Instruction, pp. 218-222, and also "Scales for the Rating of Teaching Skill," University of Minnesota Research Bulletin, No. 12, February, 1927.



The third type of teacher-rating plan is based upon an objective study of teaching results. While in practice it is frequently combined with one or both of the methods already described, its advocates claim for it a superior objectivity. They insist that a teacher should be judged by the results he secures, not by his traits or activities. Sound as this may be in theory, the "results" thus far measured are primarily those secured from administering standardized tests.

One of the most interesting attempts to measure teachers on the basis of achievements is that proposed by Kent.<sup>8</sup> His plan provides for assigning from 50 to 75 points to the results of pupil achievement in knowledge and skills "objectively measured" for each subject, and other pupil achievements secured in (a) habits of study, (b) attitude towards "work," "school government," "school organization," "moral questions," and "life preparation." To pupil achievement, however, Kent adds an appraisal of the teacher (ranging in points from 20 to 40 each) on his merits in the mechanics of work and a similar appraisal (also ranging from 20 to 40 points) as a social worker.

With these three types of teacher-rating plans before us, let us ask the question: Do they produce an objective rating of a teacher's efficiency, judged either from the standpoint of traits and activities or pupil results?

1. *Score Cards.* When we investigate score cards from this point of view, we do not find an unequivocal answer in the affirmative. Both Rugg<sup>9</sup> and Knight<sup>10</sup> have made

<sup>8</sup> Kent, R. A., "What Should Teacher Rating Schemes Seek to Measure?" *Journal of Educational Research*, Vol. II (December, 1920), pp. 802-807.

<sup>9</sup> Rugg, H. O., "Is the Rating of Human Character Practical?" *Journal of Educational Psychology*, XII (November and December, 1921), pp. 425-538, 485-501; (January and February, 1922), pp. 30-42, 81-93.

<sup>10</sup> Knight, F. B., *Qualities Related to Success in Teaching*, Teachers College Contributions to Education No. 120. Teachers College, Columbia University, New York: 1922, Ch. V.

thorough studies of the objective measurements afforded by score cards and both conclude with negative results. After a careful study of the practical applications of such scales as Elliott's, Beatty's, Boyce's, and Hill's, Rugg concludes that ordinary scales should be discarded. He states that "The unreliability of current typical ratings of teachers by principals is so great that it is almost valueless." For example, when the ratings of a large number of teachers are plotted, the curve is badly skewed. In a study of the ratings given to 7131 teachers he found that 96 per cent had been rated either superior, excellent, or good.<sup>11</sup> "We cannot justify wasting the time of our school administrators," he writes, "and deluding our teachers with fictitious 'ratings' and 'marks': even on one of the so-called 'standardized' point rating schemes *single* rating has little or no scientific validity."<sup>12</sup>

Knight's findings strike more dangerously near to the heart of rating schemes. As we have seen, all score cards consist of a number of traits according to which the teacher is separately rated. Knight made a study of the correlation between the rater's general estimate of a teacher and his scoring of this same teacher on a specific trait. It is clear that if an estimate of a teacher's ability to manage a class, or to maintain discipline, is influenced by a general estimate of the teacher, we have failed to escape from the grading on "general impressions," which, as we have seen, is the prime consideration in rating.

But this is precisely Knight's conclusion. He had the

<sup>11</sup> Rugg, H. O., "Self-Improvement of Teachers through Self-Rating," *Elementary School Journal*, XX (May, 1920), p. 671.

<sup>12</sup> Rugg, H. O., "Is the Rating of Human Character Practical?" *Journal of Educational Psychology*, XII (November, 1921), p. 426. Baird and Bates, in a recent comparison of merit ratings in Detroit with growth ratings of pupils in the classes of teachers thus rated, discovered a correlation of +.135. Cf. "The Basis of Teacher Rating," *Educational Administration and Supervision*, XV (March, 1929), pp. 175-183.

superintendents, principals, and supervisors of 129 New York teachers rate these teachers on Boyce's score card. Eight of the correlations arrived at are as follows:

General teaching ability with general intellectual ability . . . . .	.+.677, $\pm$ .03
General teaching ability with skill in discipline. . .	.+.787, $\pm$ .02
General teaching ability with voice . . . . .	.+.632, $\pm$ .04
General intellectual ability with voice . . . . .	.+.625, $\pm$ .04
General intellectual ability with skill in discipline .	.+.560, $\pm$ .04
Voice with interest in community . . . . .	.+.500, $\pm$ .04
Voice with skill in discipline . . . . .	.+.438, $\pm$ .06
Skill in discipline with morals . . . . .	.+.333, $\pm$ .11

As Knight states,

Common sense would tell us that the correlation between voice, defined on the score card as "voice-pitch, quality, clearness of schoolroom voice," and *interest in community* is probably zero, but here it was found to be +.500, while *voice* and *discipline* was +.438, and *general intellectual capacity* and *voice* was +.625. The sizes of the correlations do not correspond to the importance of the relationships.<sup>13</sup>

In other words, [to quote Knight again] a judge has a certain opinion of a teacher *in toto*, and his opinion is given according to his general impression in answer to any significant question about that teacher. Thus, the general estimate may be taken to permeate all particular judgments, and conversely, particular judgments are simply defenses for, or justifications of, the general opinion which has thus been held.<sup>14</sup>

Knight secured similar conclusions from judgments passed upon teachers by fellow teachers. Thus, despite a correlation on the average of +.164 between intelligence as measured by psychological tests and general teaching ability, the correlation of these traits as measured by teachers' judgments was +.935  $\pm$  .014. "Either tests are not

<sup>13</sup> Knight, F. B., *op. cit.*, p. 60.

<sup>14</sup> *Ibid.*

measures of intellect at all, and hence the correlation  $+ .164$  is false, or the judgments of the intellect include so many other qualities that they really are not judgments of intellect at all and the  $+ .935$  correlation is false."<sup>15</sup> Whether or not we agree with both of these alternatives we can very well accept Knight's statement to the effect that: "It seems fair to conclude, that in judging particular traits general estimate influences the particular estimate to such a degree that judgments of particular traits are in themselves of little practical use."<sup>16</sup>

Damaging as these statistical conclusions seem to be, they are not far different from what a discerning layman might expect. He knows that "human nature is complex," and this means, for one thing, that the whole of an individual's personality is not subject at any one time to detailed analysis. We may analyze the qualities that most obviously relate to a specific activity, but since this activity is only one phase of a person's total behavior, the qualities specified are subject to influences from other intimately associated qualities not revealed by the analysis. The first essential in a scientific experiment is to know and to control the factors that operate in that experiment. This requires that factors be either isolated from all influences unaccounted for, or that the degree of influence exerted by outside factors be calculable and known at all stages. The common expression "Human nature is complex" means, in this connection, that we recognize the presence of factors in a teaching situation whose values are unknown and which thus render accurate appraisal uncertain. In pedagogical parlance we call these unknowns "personality factors" and because of their presence it frequently happens that a teacher renders invaluable service when a superficial or hasty inspection would indicate a violation of all approved principles of teaching procedures.

<sup>15</sup> Knight, F. B., *op. cit.*, p. 53.

<sup>16</sup> *Ibid.*, p. 10.

The influence which one personality factor may exert in determining a teacher's success is well illustrated by Ruediger. He writes:

. . . . Another point that is not adequately brought out in rating sheets is that the supreme work of a teacher is quite often dependent on only one point of real excellence, all the others being mediocre or even less.

One of the most stimulating teachers that I had in (the) normal school was a chaotic instructor, a poor disciplinarian, and he took no interest in athletics, debating, or other student activities. His only merit was that he had his own ideas about everything that came up in class or that he could bring in by the heels. He questioned and doubted everything already established or about to be established, and he did this, not to be smart, but sincerely. That was to us in the class a most welcome influence. Not that we followed him and accepted his views — we seldom did that — but he caused us to sit up and take notice. We began to think about things and to examine them on all sides before giving them our adherence. On any rating scale that I have ever seen this teacher would have made a sorry showing, yet as I look back he stands for one of the best influences in all my schooling.

Another teacher that I knew in a high school where I was teaching also appeared to have just one outstanding point of merit. He had the power to stimulate quiet reflective thought. When you dropped into his class the first impression you got was that both he and his class were dead. But in a few minutes it became evident that they were not dead; they were thinking. And if you stayed a few minutes longer you, yourself, became enmeshed in the spell and you stayed and thought, thought about relations and values, till the bell rang. It made no difference whether the man taught mathematics, history, or Latin, he got the same reflective response, and he reached freshmen about as easily as seniors. Again I know of no rating scale that would have done justice to this man.<sup>17</sup>

<sup>17</sup> Ruediger, W. C., "Rating Teachers," *School and Society*, XX (August, 1924), pp. 263-268.

Ruediger's second illustration indicates a second meaning of the expression "human nature is complex." The weighting which we are tempted to give to a human trait in the abstract becomes an erroneous weighting when combined with others in actual life. Thus after diligent investigation we may conclude that personal appearance, on the average, is worth 30 points out of 250 accorded to personality, and personality is worth 250 out of 1000 ascribed to a perfect teacher. But when we examine the work of an individual teacher in an actual situation, we may be surprised to find that neither appearance nor personality (considered as the sum of the parts — poise, health, judicial sense, and so forth) tallies with our system of rating. Traits of one value in the abstract or on the average seem to equal a different value in certain concrete combinations with other traits.

The reason for this difference will be found in any logic textbook. There we may read about the fallacy of composition, the fallacy of ascribing to a whole what is true only of the parts taken separately. Some wholes are equal to the sums of their parts, but this is not always true, and the whole of a teacher's effectiveness may be greater or less than the sum of the values assigned to his analyzed parts. In actual working relation with other qualities they take on unforeseen importance.

The cause for this variable character in the significance of a teacher's traits resides in the peculiarities of the teaching relation. In a most profound sense the qualities of a human being are much like the colors of a chameleon. They vary with their context. It is a common observation that children change with the character of their associates and reveal traits at school which they do not show at home. It is also true that a teacher varies with the pupils with whom he works and nothing is more important for fruitful results than to find the general type of pupil and work best

adapted to develop the possibilities within a teacher. Moreover, the conditions under which a teacher works, the nature of the supervisor-teacher relation, the spirit which pervades the school, the care with which the essentials of equipment and supplies, lighting and heat and ventilation, and the general essentials in the way of housing and room decoration are provided profoundly affect the attitudes of both pupils and teachers. The rater does not have a clearly objective situation before him. He is asked to appraise the performances and the characteristics of an individual whose behavior will vary with the self-same conditions of which he is a part. This demands an analysis of a teacher more keen and discerning and sympathetic than that encouraged by the ordinary rating scheme.

Not only does this situation require a keen and discriminating analysis of a teacher's performance; it calls as well for a correction of the errors in the supervisor's judgment, which in the nature of the case he is unable to correct. In all other fields of scientific observation the technique of procedure provides for correction of errors. The difference between an expert surveyor and a novice, for example, does not consist so much in the fact that the expert is free from errors of observation while the latter introduces error. It is rather that the expert reduces his errors to a regular and known quantity. In his calculations, therefore, he can deduct or add to his results a constant which offsets his mistake. The same procedure is followed in other fields. The expert's error becomes a known factor. But this system of correction is obviously impossible in teacher rating. The performances of the teacher are complex, the teaching situation constantly changes, and the observations of the supervisor are too few and of too short a duration to make possible the standardization of a rater's judgment.

It will not do to argue that these variables are unimportant or, being difficult to determine, they should be ignored.

We must remember that its so-called objectivity and accuracy is said to be the supreme virtue of a rating plan. If examination reveals inaccuracy and biased observations as inevitable outcomes, we should admit that our original purpose is incapable of realization. To proceed otherwise is to give solidity and an authoritative character to data which are at best but relative and partial conclusions.

2. *Man-to-man Comparison Scales.* Our discussion thus far applies in large measure to the man-to-man comparison scales as well as to the score cards and we need not retrace this ground. Monroe and Clark conclude in this connection that

neither score cards nor man-to-man comparison scales may be expected to yield highly accurate measures of teaching efficiency. Even under the most favorable conditions the probable error of measurement will be so large that serious limitations must be placed on the measure secured. It is, however, worth while to note that the measures yielded by the man-to-man comparison scale will ordinarily be more accurate than those secured by the usual score.<sup>18</sup>

In the use of the man-to-man comparison scale there is the practical difficulty of selecting teachers who typify satisfactorily the various rubrics and the various grades under any one rubric. We may seriously question whether the time and energy a supervisor and his teachers may devote to the construction of such scales as a basis for teacher improvement are justified by the results secured. Their time and energy are limited and it would seem that an equal amount of both dedicated to the actual improvement of instruction, with detailed attention to the specific and individual problems which teachers encounter, would yield better fruit.

As indicated above, Brueckner and others have attempted

<sup>18</sup> Monroe and Clark, *op. cit.*, p. 11.



to remedy the difficulty of securing representative teachers for use on man-to-man scales by substituting descriptions of units of measure of skill within each type. This is undoubtedly a step forward in the direction of objectivity and when the use of these scales is prefaced by adequate preparation and training in their application, supervisors may well receive a needed direction and guidance in identifying and analyzing significant items in teaching. Preliminary tests of reliability of these scales indicate a fairly high degree of reliability. It remains to be seen, however, whether this reliability is due to the character of the scales themselves or to the training given those who administer them. That is to say, the nature of the preparation for the use of these scales is such that a supervisor may learn to *conventionalize* his judgments. Obviously this comes to mean seeing eye to eye with others. This has its values on occasion, but it is by no means the same thing as detecting those essential factors in a teaching situation which may lead to teacher improvement.

3. *Ratings of Teacher Achievements.* Can teachers be rated fairly by reference to their influence upon pupils? Here again we face the evils of a limited judgment. If a teacher's promotion or salary is determined by what he accomplishes in the lives of his pupils, these accomplishments must be accurately arrived at. But the task of appraisal is as difficult as that which faced Shylock when Portia insisted:

Therefore prepare thee to cut off the flesh.  
Shed thou no blood; nor cut thou less nor more  
But just a pound of flesh.

For, clearly, only certain pupil achievements can be measured. These are the most obvious and the most tangible, those secured from the use of pedagogical and educational tests.

Now, it is one thing to use these tests in order to reveal pupil needs, or necessary points of emphasis in teaching, but it is another thing to measure a teacher's worth by reference to them. In the latter case we should expect teaching method soon to adapt itself to a drill procedure designed to bring forth these educational products and to neglect to emphasize and to concentrate upon other results, which are either intangible or are slow in their development. This, of course, would be disastrous. Rugg states very well in this connection:

If it were possible we would measure the efficiency of a teacher by determining the effect of his instruction on the all-round lives of his pupils. The product of such instruction, however, eventuates slowly. Outcomes are remote, not immediate, except as they are purely intellectual in character.<sup>19</sup>

Secondly, the causes for a pupil's achievement are usually plural in number and complicated in such a way as to defy accurate analysis. No teacher should be praised or damned for outcomes of which he is either totally not responsible, or, at best, a contributing factor of unknown significance. The influence of the school as a whole, home encouragement or discouragement, personality limitations, physical defects, the stimulus or discouragement that comes from associates, various happy or unfortunate combinations of circumstances are but a few of the many factors which function to determine a child's progress in school. Moreover, is the progress of any one year due to effective instruction or to the general maturing process, the ordinary by-products of growth? Psychology cannot supply us as yet with group medians of any definiteness which will indicate the growth normally to be expected in arithmetic or geography or spelling at the various school ages. If it tells

<sup>19</sup> Rugg, H. O., "Self-Improvement of Teachers through Self-Rating," *Elementary School Journal*, XX (May, 1920), p. 673.

us anything at all, it is that, in matters of development, the variations as between individuals is so great that group medians or averages are of little value.

It would seem, therefore, that an appraisal of merit based upon those pupil results which lend themselves to objective measurement is incomplete and partial. What, then, shall we say to those other accomplishments which Kent, for example, includes in his scale? What basis is there for rating numerically a specific teacher's influence upon his pupils' habits of study, their attitude toward "work," "school government," "school organization," "moral questions," and "life preparation"? That a teacher's influence is clearly discernible at times in these matters is true, but to presume that it is subject to definite rating or can be isolated from other contributing factors is absurd. No stronger argument against the feasibility of such a rating scheme is needed than the spectacle of a supervisor or an administrator so blind to the complexities of life that he will presume to promote or demote teachers on the evidence which such a scale will afford. A board of education or a superintendent of schools cannot afford to place an instrument so potent for evil and misunderstanding in the hands of subordinates.

Our discussion thus far has centered upon the question: Can teachers be rated fairly? We now wish to refer in passing to the more practical and administrative aspects of the problem and answer first of all the question: Is a rating scheme expedient, as a basis for determining reemployment, salary increases, and promotions?

First, as regards reemployment. Anyone who is familiar with the situation knows that the number of teachers in any one school system who are discharged annually for inefficiency is exceptionally small. And, if we may trust Rugg's conclusions to which we referred earlier, rating scales in their actual operation are not very successful

dragnets in the way of bringing to light teachers eligible for discharge. Thus, if out of 7131 teachers, 96 per cent were rated superior, excellent, or good, we may conclude that the number rated as unsuccessful or as failures would be comparatively small. To subject all teachers to a system of inspection and rating designed merely to catch the few inefficient teachers is hardly a wise administrative policy.

The chief limitation of rating scales in this connection, however, is the fact that they are not designed to furnish conveniently the data sufficient as a basis for discharging a teacher. Frequently, as Ruediger has shown,<sup>20</sup> a teacher's failure proceeds from an obscure personality trait too difficult to discern and not revealed by rating scales. Consequently, special studies of this teacher are necessary and special data must be furnished which will sustain executive action regarding his discharge. In large school systems the matter of outright dismissal is becoming more and more complicated and difficult. It would seem that an intelligent supervisor who actually works with his teachers, understands them, and has their confidence would be in a position to consult with a teacher who is a manifest failure and convince him to change his occupation of his own free will. Nothing is more disagreeable than the life of a teacher who clearly is unfit for teaching. His day is one unending series of harrowing experiences.

Not all teachers, of course, who are vocationally misfits, will respond to this method of procedure, and definite action leading to their discharge will have to be taken in order to safeguard the interests of the schools. In such cases, as we have indicated, supervisors and administrative officers will have to secure definite and conclusive information, resting upon concrete and specific data, superior to that which any rating scale affords.

<sup>20</sup> Ruediger, W. C., *op. cit.*, p. 265.

When we turn to the rating scale as a means for determining promotions and salary increases, we encounter further limitations. Promotions, like demotions or discharge from service, call for an analysis and supplementation of rating scores to such a degree that the scale becomes of little value. Usually a promotion involves selecting a teacher for a position that calls for very definite qualities and involves rather peculiar conditions. Consequently the best results follow a conference in which officials concerned suggest and discuss the relative merits of eligible candidates for the position. Frequently the office to be filled calls for the exercise of traits not directly measured by rating systems. The background and experience, the professional preparation and general information, of the individual apart from teaching may be important. In any case rating cards supply but a fraction of the required data, and it would seem that the information they afford regarding promotions hardly justifies the labor involved and the by-products they entail in the way of annoyance, apprehension, and suspicion. Their value must be found elsewhere than in such matters as discharge and promotion.

Is it in the determining of salary increases?

If our arguments regarding the possibility of accurate rating is sound, the answer must be in the negative. But our discussion here is independent of the possibility of securing fair ratings. We write primarily from the standpoint of the needs of constructive supervision. It is generally agreed that the first essential in successful supervision is the existence of a sympathetic and coöperative relationship between supervisor and teacher. When this relationship is complicated with a rating for the purposes of determining the salary status of a teacher, there is established a barrier between supervisor and teacher which interferes with open and cordial relations. Improvement of instruction and professional-mindedness assume secondary impor-

tance and emphasis shifts to salary status. When the rating which a supervisor makes is known to the teacher, it easily becomes a bone of contention, and when it is not known, it fosters suspicion and lack of frankness.

As against these disadvantages it would seem more desirable to devise a way in which questions of salary will disturb to the least possible degree the relations of supervisor and teacher.

This can be done in large cities by providing for automatic salary increases with stated periods of service and types of positions held and with uniform minimum and maximum points. In small systems the rating scheme is not essential for determining a teacher's salary and, consequently, the more distinctly supervision and salary are separated, the better will be the relations between a supervisor and his teachers.

This is no place for a detailed discussion of what constitutes the correct basis for a teacher's salary. It is pertinent to our argument, however, to point out that payment upon the basis of merit is impossible. Wherever merit is supposed to determine the salaries teachers receive, rather glaring inequalities are easily uncovered. Payment according to merit is a fiction, because no one can translate into dollars and cents the value of any degree of merit, granting for the moment that merit itself can accurately be appraised. A more suggestive approach to questions of salary is to determine the needs of the professional life and what income is necessary to provide for these needs. This indeed involves study and investigation, but as a policy, it has within it the possibility of relating income to the practical problems of living and the purchase of the essentials for the practice of a profession. The specific sums thus called for would vary from time to time and from place to place, but supervision would be freed from entangling alliances with salary increases.

We have not forgotten that advocates of rating scales stress the importance of scales as instruments for improving teaching. Burton in his book on *Supervision and the Improvement of Teaching* emphasizes the point that their chief value is in fostering a diagnosis of the teaching process, and he, in common with Rugg, urges that teachers be encouraged to coöperate in the construction of scales. This purpose of concentrating the teacher's attention upon the elements of good teaching is also the chief function of Johnson's checking list.<sup>21</sup>

We cannot pause here to discuss in detail the merits of a checking list such as that suggested by Johnson. Suffice it to say that it is at best a crude and rough guide to the essential elements in good teaching. It serves to give one the first overview of the teaching performance, a general and superficial job analysis, rather than a vital and profound analysis of the teaching act. It has its purpose in calling the attention of beginning teachers to the most obvious factors in the teaching situation, but there is a positive danger in its use to any great extent as a means of fostering professional interest and growth. This danger consists in the fact that it tends to distribute attention over a multitude of items, whereas a teacher's growth is stimulated best by centering attention upon one or two significant and relevant problems. It has its place, just as a preliminary examination blank in a medical office has its place. But to concentrate upon the construction of such scales as a means of improving instruction is as reprehensible as the procedure of a medical specialist who restricts his diagnosis and treatment to the items appearing upon his preliminary examination blank. This blank, as the checking list, reveals frequently only the general symptoms whose causes are more obscure. Were the specialist to confine his attention to these items and not penetrate to the more funda-

<sup>21</sup> Cf. *Administration and Supervision of the High School*, Ch. XVIII.

mental causes of the disease a cure would hardly be forthcoming.

As against the use of such a preliminary analysis, then, we would urge the organization of supervision in such a way that supervisors can work intensively with their teachers.<sup>22</sup> In the secondary school this is probably best provided for by the selection of competent heads of departments. At all events the supervisor should know his teachers intimately and work with them in the solution of their common problems. He will thus be in a position to penetrate beneath the obvious items in teaching and attack central difficulties or foster the development of qualities that are full of promise. Thus will he offset the relativity in his own judgments to which we referred when discussing the errors of relativity in rating teacher traits. By his frequent contacts with his teachers he will subject his appraisals to tests that give to them an objectivity impossible for an inspectorial supervision or an infrequent visitation. An opinion formulated out of a mass of experience in trying experiments, engaging in matters of research, and working at the solution of specific teaching problems will have an objective character quite different from that sought by rating scales, but one more fruitful for teacher improvement.

Our first objection to the use of self-rating scales as commonly administered is that it is but a preliminary step which is in danger of going no farther. We would contend, secondly, that they presuppose a definite standard of teaching. Johnson's checking list presupposes as a standard a recitation technique calling for recitation, assignment, and study. Irrespective of the merits of this particular division, it should be pointed out that standardization is at the heart of teacher rating. Without a standard there is no basis for rating; and yet the secondary school is just now in the process of forging new methods of teaching. Rather than

<sup>22</sup> For further discussion of this point see the following chapter.



to set up rigid standards by reference to which teachers will watch their performance, supervisors would do better to encourage new departures and to work sympathetically with their teachers in an effort to guide and direct a transition to new methods with a minimum of waste and confusion. In these experiments there is an opportunity for concentrating teachers' attention upon those elements in the psychology of learning and personality development which the traditional teaching procedure ignores and which are essential for vital growth. By thus centering upon fundamentals the efforts of teachers will be given a positive, constructive character and they will be led to scrutinize their methods in a much more vital way than it is possible to do in the construction of self-rating scales.

When we were discussing the difficulties of rating teachers on the basis of pupil achievement, we emphasized the matter of plurality of causes operating in learning situations and the consequent impossibility of determining with any degree of accuracy the teacher's share in outcomes. We should like to return briefly to this point.

It is a well-established principle of scientific method, when conducting experiments and drawing inferences, that the values of the elements which participate in a situation be known. Thus, if A, B, and C contribute to a result R, no valid inference can be drawn regarding the value of A until we know the influence exerted by B and C apart from and in conjunction with A.

The supervisor who will follow this principle of procedure in connection with his use of teacher rating as an instrument in supervision will find himself in a curious position. As supervisor he presumably should exercise some influence upon teaching situations. As an objective appraiser of teaching merit he must scrupulously refrain from participation! How can he, as a scientist, enter either a debit or a credit upon the account of a teacher with whom he has

engaged as a partner in a common enterprise? If he has assisted in formulating plans, in helping his teachers to meet critical problems, to diagnose pupil difficulties, to institute remedial measures, and in general to raise the level of their teaching, has he not affected the situation so that a scientific distribution of responsibility for results becomes impossible?

The dilemma which seems thus to confront us should suggest that in one sense at least the supervisor's function is different from a truly scientific appraisal of a teacher's traits as such and the specific evaluation of his efforts toward pupil achievement. In other words, the emphasis upon measurement may easily become a false emphasis. The interests of supervision and fact finding are not in all respects identical. The supervisor's primary concern is not so much with the teacher's traits or the results directly ascribable to the teacher as it is with the furthering of pupil growth. This may call for an analysis of the situation in order to determine what factors might be varied in the interests of child development and in this analysis the teacher's contribution, as well as other factors, may well become an item for consideration.\* But even here justice requires us to remember that the teacher's traits are variables of more than one function and not specific entities with an assignable value as such. Even the teacher's traits will vary with the presence or absence of equipment with which both teachers and pupils can work, with the introduction of instruments of diagnosis, with encouragement and suggestion, or with the assurance that he will be free to exercise his own originality and independence as against a meticulous adherence to prescribed ways of proceeding.

We suggest, therefore, that supervisors in their capacity as supervisors abandon the rôle of pure scientists. They cannot and they need not weigh scientifically the traits of

their teachers or the insulated value of teachers' effects upon pupils. This presupposes what is not true, that the teaching relation is a static affair in which traits and factors are elements of an unchanging character. The teaching relation is a moving, dynamic thing. It can be analyzed to a certain extent, and the influence of this factor or that factor, *under a given set of circumstances*, may become sufficiently known to suggest methods of control and modification; but this is not analogous to a scientific experiment in which the influence of elements are at all times assignable a definite value.

There are times, of course, when the supervisor is called upon to pass judgment upon his teachers. He must recommend or fail to recommend them for promotion or dismissal, and his advice is solicited with reference to changes in positions. As we have already indicated, however, these judgments will run along lines different from most rating scales. They call for the stressing of points that bear directly upon the nature of the contemplated position and the supervisor in his report will want to ask himself: How will this teacher who functions in this way under these conditions be likely to work under different circumstances? He will recognize, in other words, that traits are relative.

The type of judgment the supervisor must exercise when reporting on a teacher to a general office or a neighboring school system requires, then, information that is both different from and more detailed than that usually encouraged by a score card. If score cards alone are used for this purpose, the teacher is assured little protection against hasty and superficial judgments. Their outline character enables a superficial and careless supervisor to file in a central office a rating of a teacher's work which is indistinguishable from the judgment of a competent and an understanding observer. Not infrequently score cards serve in this way to give an objective and permanent gloss to what is nothing

less than the "general impression" they were originally designed to offset.

We recognize also the necessity that supervisors in teacher-training institutions keep on file permanent records of the work done by student-teachers. Records of this character are final appraisals of the student's work and again should differ from the analysis of his activities while engaged in practice teaching. The analysis of the teaching act should have for its purpose assisting the teacher's growth and should emphasize factors that might be modified toward this end. The final rating, on the other hand, will be more in the nature of an inventory of judgments upon items relevant to the student's later work as a teacher. It should, in consequence, give some indication of the extent to which a student has mastered the first steps in teaching, and it should also throw all possible light upon factors that are pertinent to this estimate of future growth. Such records can well afford to omit judgments upon items that are at best passing phases in the student's life, or perhaps more truly reflections of a supervisor's prejudices and tastes than genuine insights into the student's future development.

We conclude, then, that score cards in themselves do not insure either objectivity of judgment or a well-rounded appraisal of a teacher's worth. In the first stages of teaching and supervision, when teacher and supervisor are novices, they may serve as convenient inventories of a teacher's functions. Experience, however, soon renders this crutch unnecessary. In so far as the supervisor passes sound judgments upon his teachers, he will do so upon the basis of intimate contacts with their work. These judgments will be the outcomes of efforts to engage with teachers in the professional activities that constitute the central elements in supervisory procedure. When a supervisor works intensively with his teachers in the solution of their problems and in the undertaking of new ventures, he will know their

strength and their weaknesses more accurately than is possible from a few observations with a score card. The frank conversations, the revelations that come from association on committee work, the discussions that grow out of the mutual visiting of classes and centering jointly upon specific schoolroom problems will give him a sound insight into his teachers' qualities without the embarrassment and the misunderstandings commonly engendered by the introduction of rating scales in the supervisor-teacher relationship.

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## CHAPTER IX

### SUPERVISION THROUGH CLASSROOM VISITATION

The conditions which afford the best opportunity for estimating the worth of the teacher, as we pointed out in the previous chapter, are those which encourage vital contacts between the teacher and supervisor. When they are engaged in the solution of common problems to which each brings to bear his own unique contributions, potentialities which undoubtedly would have remained undeveloped had the supervisor been concerned primarily with a "fact finding" or scientific program, find effective expression. If supervisor-teacher relationships are to be dominated by a dynamic conception of growth rather than by a demand for exact measurement of traits or trait actions, then it becomes necessary to consider carefully that important field of supervision which is commonly designated as "visitation and conference." Obviously the policy which the supervisor adopts in regard to this phase of the program will determine in a large measure his effectiveness in furthering pupil and teacher growth.

While recent discussions have emphasized the value of various coöperative procedures for improving learning and teaching, it is undoubtedly true that supervisory programs are, for the most part, concerned chiefly with visitation. In a study of current supervisory practices in a representative group of small cities, Melby<sup>1</sup> reports that, despite the fact that teachers rated visitation rather low on the scale

<sup>1</sup> Melby, E. O., *Organization and Administration of Supervision*. Northwestern University Contributions to Education, School of Education, Series No. I, pp. 89-130.

of helpful devices, the supervisors regarded it highly and used it more than any other instrument of supervision. Hampton<sup>2</sup> found that the direct supervision of teaching occupied 15.18 per cent of the time of 130 public-school principals located in various parts of the United States; while only 4.72 per cent of the time was devoted to "improving" conditions for teaching. Practically all of the time devoted to "improvement" was spent in conferences with pupils, in diagnosing their difficulties, and in classifying them, rather than in direct contact with the classroom teacher. Trabue concludes his discussion as follows:

Apparently public-school principals have an idea that the mere presence of their observing faces in a classroom will inspire and improve the instruction, especially if they confer occasionally with a few pupils about their school work and administer a few tests. Most principals are at least doing little else that could be called supervisory.<sup>3</sup>

The conclusion which must be drawn from these and other inquiries is that classroom visitation has been stressed out of all proportion to its usefulness in the supervisory program of most school systems. However, it is inconceivable that it will ever be completely supplanted as a supervisory instrument since it affords possibilities for vital contacts with teaching and learning situations.

Our present purpose is to examine the prevailing procedures in visitation and to suggest a program which seeks to place this important instrument of supervision in its true perspective, and which at the same time furthers the democratic conception which has been presented in previous chapters. The problem of providing adequately for indi-

<sup>2</sup> Trabue, M. R., "The Activities in Which Principals Are Actually Engaged," *Educational Supervision*, First Yearbook of the National Conference on Educational Method, pp. 123-132. While this report deals chiefly with the work of elementary-school principals, the findings are fairly typical of the situation in secondary schools.

<sup>3</sup> *Ibid.*, pp. 130-131.



vidual conferences will receive consideration in our next chapter.

One of the first problems which confront the supervisor is the determination of a policy regarding procedures to be followed in visitation. He will need to consider the following questions: Should the teacher be notified some time in advance of the date of visitation, stating the particular points to be observed? Should all visits be definitely scheduled by the supervisor, even though the teacher is not notified? Should the supervisor follow the example of the physician and make visits only on "call"? The various procedures which are implied in these questions have received a large amount of discussion in the literature of supervision. We shall therefore examine them very briefly, devoting our major emphasis to their implications for a program of supervision.

The announced visit may be used merely as a device for promoting good feeling among teachers. For example, it is reported that in one school system, in which a former supervisor had been in the habit of entering classrooms by the back door without being noticed by the teacher, a schedule of announced visits was put into operation for the purpose of allaying the suspicion that the supervisor was trying to "catch" the teachers off guard. Teachers were merely notified of the coming of the supervisor. In all other respects the system continued to operate as before. However, where the announced visit is systematically adopted,<sup>4</sup>

<sup>4</sup> For detailed descriptions of such plans, see: Pittman, M. S., *The Value of School Supervision*, and Yawberg, A. G., "Instructional Supervision with the Announced Visit as an Important Factor," *School Review*, XXXI (December, 1923), pp. 763-776.

NOTE: It is doubtful whether these plans are used widely except in the case of special supervisors who visit on schedule usually for the purpose of teaching. For an analysis of types of visitation as to frequency, the reader is referred to: Melby, E. O., *op. cit.*, pp. 89-106. These findings are in accordance with those of Fred Ayer and A. S. Barr, reported in the *Organization of Supervision*, pp. 70-72.

it usually operates in the following manner. The program developed by the supervisory staff of a city or a county, or coöperatively through consultation with the teaching staff, calls for a series of general problems to be studied and discussed during the year. For example, one month the study centers upon *lesson planning*, another is devoted to developing skill in supervising *study*, while in another, the major efforts of all are devoted to improving the technique of *questioning*. Teachers' meetings are held, programs of study and experimentation are outlined, and teachers are encouraged to try out the effectiveness of new principles and procedures in their classroom teaching. The supervisory staff then makes up its schedule of visitation for a given month, notifying each teacher of the exact day and period of the visit, and at the same time announcing that the visit will concern itself chiefly with some general topic, say *lesson planning*. The teacher is invited to have plans available and to give a practical demonstration of how lesson planning actually functions in a classroom situation.

The proponents of such a plan claim for it the following outstanding merits: (1) It affords a definite basis for the supervisory visit. The purposes are clearly designated several days in advance, so that preparation may be made for the visit by both teacher and supervisor. (2) It results in the saving of time on the part of the supervisor. In scattered areas he may have to travel long distances to reach his teachers. Frequently he makes a long trip only to find that the schedule has been changed or that a written test is to be given. (3) It eliminates the element of surprise and alarm which so frequently pervades a school building when the presence of a supervisor is discovered. Not infrequently the unexpected "guest" is effectively announced by all sorts of prearranged signals, so that teachers may at least make hasty preparations for his

entertainment. (4) It makes possible a concerted and unified attack upon the major problems of learning and teaching. To have the entire staff engaged in an exhaustive study of a particular problem at a given time adds momentum to teacher improvement by providing for a systematic attack upon recognized weaknesses.

This plan of procedure is, however, not without its dangers and limitations. In the first place, there is danger of supervision becoming an end in itself. The regular school program, which presumably has been arranged to promote pupil growth, is modified so as to demonstrate the particular procedure being studied and "supervised." Suppose, for example, that the lesson plan is being studied. The center of attention on the part of the teacher becomes *planning*. He works and plans, applies the plans and revises them to the end that he may present a successful demonstration in the presence of the supervisor. There is a definite consciousness of the *method* to be used rather than of the results to be achieved. Such an emphasis might be justified in a training school, or in individual cases of demonstrated weakness, but it is hardly appropriate for use with a supposedly well-trained staff *as a whole*.

In the second place, this plan of visitation focuses upon a general aspect of teaching or learning regardless of ascertained individual pupil and teacher needs. It thus violates the important psychological principle that thinking begins with a felt difficulty. In every teaching staff, all manner of difficulties are present. It is quite impossible to generalize them without ignoring the central problems of the individual teacher. True, the supervisor may aid the teacher in solving other problems as well as the general problem under consideration, but these are apt to be obscured by the emphasis placed upon the "program." For example, here is a teacher who is attempting to individualize his instruction. Crucial problems relating to supervised study

and testing are occupying his attention. For the sake of the unified program he feels that he should devote his time to lesson planning. Otherwise, he will not be ready when the supervisor arrives, and may even be accused of failure to coöperate.

In the third place, such a procedure ignores the fact that teachers improve along various lines concomitantly, rather than in only one direction at a time. The result is much the same as that of drives, such as "Thrift Week," "Better Baby Week," or "Education Week." Instead of being the object of continuous attention, important items are emphasized intensively for a short period, only to give place shortly to some other campaign. It must be admitted that such drives are frequently successful for a short period of time but, as a rule, they indicate an abnormal condition which must be dealt with drastically, rather than a normal one. Certainly this is apt to be the case so far as problems of learning and teaching are concerned, since they are usually best worked out by careful and painstaking effort over an extended period of time. In fact one might say that such problems are never completely solved — they shift with each new situation.

In the fourth place, the announced visit is likely to perpetuate the traditional conception of SUPER-vision. The way for the "Messiah" is prepared in advance. Everything must be in readiness for his coming. He is the all-wise expert who comes to dispense wisdom to a waiting world. The school program must be modified in accordance with his demands. Even though the most cordial and democratic relations may exist between supervisor and teacher, the situation becomes strained because of the fact that in a sense the entire school, including the teacher, is on exhibition. The supervisor functions as a judge rather than as a coworker who looks at a given situation from a point of view only slightly different from that of the teacher.

It should be recognized, then, that this plan has such decided limitations as to make its general adoption very questionable. In certain cases involving long-range supervision in scattered areas, its use might be justifiable as a temporary expedient, especially where the professional preparation of the teachers is meager. However, even in such cases, an attempt should be made to professionalize the high-school principalship and the department headship so that a program of intensive supervision may be substituted as soon as possible.

Announced visits are, of course, also *scheduled* visits. The usual meaning of that term, however, does not necessarily imply notification to the teacher. Hence the problem as to whether or not the supervisor should follow a regular schedule involves only a consideration of the necessity for carefully budgeting the time to be devoted to visitation. Certainly random visitation with little or no definiteness of purpose should be discouraged. However, the alternative is not to follow a rigid schedule. The supervisor who is sensitive to the problems of pupil and teacher growth experiences great difficulty in following a definite schedule made some time in advance of visitation. To attempt to do so tends to mechanize the entire process and to defeat the purposes of supervision. There is no virtue in the attempt which some supervisors make to visit each teacher an equal number of times during a given month. Such a plan substitutes blind routine for intelligent direction.

A plan of visitation which has been discussed widely and usually with general approval is that which is known as "visitation on call." Barr and Burton indicate their approval of this plan in the following words:

A certain large city announced a few years ago that after a certain date the bulk of supervisory work would be done in response to calls from teachers, instead of through routine, scheduled visits. It was thought by some that the supervisors would have

nothing to do, that such a procedure would eventually destroy their positions. As soon as the spirit and efficiency of the plan was demonstrated, however, the supervisory staff, an unusually large one, found itself completely overwhelmed with work. This staff has never been able to render the amount of service which is requested. The total number of calls received could not possibly be cared for. Such a situation is an incontrovertible index of good supervision.<sup>5</sup>

The general conclusion which these authors reach is that all visits by supervisors,<sup>6</sup> except when interested in securing information on "general instructional conditions," should be made only on call.

This plan seems to have been carried over from the medical or legal profession. The doctor, as an expert in diagnosing and treating disease, holds himself in readiness to respond to calls from patients. He does not make the rounds of the neighborhood in order to determine who is in need of assistance. If he did so, it is possible that he would be received as coldly as are the visits of some supervisors who operate on regular schedules. Likewise, the attorney (unless he has forgotten his legal ethics) confines his services to those who have sufficient confidence in his ability to ask for them. Why then should not the supervisor follow the lead of the older professions? Like most analogies, there is a point at which this one breaks down.

Granting that the supervisor is an expert, as capable of lending assistance in his field as is the physician or attorney, it is debatable whether he can render the maximum service to the schools by conducting his work exclusively on this plane. The teacher and the supervisor are both concerned with the same fundamental problem, pupil growth. The

<sup>5</sup> Barr, A. S., and Burton, W. H., *The Supervision of Instruction*, pp. 144-145. D. Appleton and Company.

<sup>6</sup> The term "supervisor," as used here, does not include the principal, who should make both announced and unannounced visits, as well as some visitations on call.

teacher brings to bear upon the problem an intimate knowledge of the pupils with whom he works, the supervisor, a more intimate knowledge of related problems in other fields and in other stages of development.. That is, the supervisor, because of his wider contacts, may see the problem in its wider context and possibly in its deeper implications. The question of whether he is more *expert* need not be raised at all. To assume that he is, is to provoke invidious comparisons and to create a gulf between him and the teacher which no amount of insistence upon "coöperation" can possibly break down. In a last analysis both should be highly skilled professional workers. If the supervisor-teacher relationship is one of coöperative endeavor in which the experiences of one serve as complementary to those of the other, supervision then becomes much more than an instrument for "fixing trouble."

Visitation-on-call implies that supervision is primarily for the purpose of giving assistance to those who need it. While such a conception might serve the physician very well, for the supervisor it is entirely too narrow and restricted. As educational leader, he seeks to enlist his fellow workers in programs of experimentation, in curriculum reorganization, in a study of problems of child guidance, in school and home relationships, and in the many fields where leadership is necessary if the educational process is to function properly. By enlisting the entire staff in coöperative efforts, problems are anticipated and solved by the teachers themselves. In this task the supervisor reveals his expertness rather than in either "telling or showing the teacher exactly how to do it."

What, then, shall be the policy of the supervisor with respect to these various procedures in visitation? Certainly, if the proper supervisor-teacher relationships exist, many of the objections which have been voiced tend to disappear, so that a number of procedures may be used

successfully in the same school system. When the supervisor ceases to emphasize the measurement of teacher traits, or the "checking up" on the teacher, and centers upon the stimulation of growth through the coöperative solution of problems, the particular type of visitation becomes relatively unimportant. The consternation which prevails under the autocratic system when the unexpected arrival of the supervisor is announced is due largely to the fact that the teacher feels that he must make as good an impression as possible if he is to be rated. Instead of inviting the discussion of problems, the teacher may consider it to his advantage to conceal them, lest his mistakes result in a low score. The often heard comment of the teacher to the supervisor, "I wish you had visited me yesterday, because I had such a good recitation," is eloquent testimony of an attitude which grows out of a desire to secure a high rating from the supervisor. When the supervisor is regarded as a coworker, the unannounced visit is accepted as a matter of course. The coming of the supervisor means only that the combined judgments of both the teacher and the supervisor are utilized in the solution of problems of growth. Under such conditions the absurdity of advanced announcements for the purpose of affording the teacher the opportunity to make extraordinary preparation is so evident as to need no discussion. The very fact that either the teacher or the supervisor should consider it necessary to announce visits in advance indicates that a barrier exists between them which prevents the full and free interplay of ideas. The unannounced visit, when freed from the tyranny of the "fact-finding" attitude, becomes a satisfactory and desirable instrument of supervision.

The unannounced visit should not, of course, be confused with the random type in which the supervisor "drops in" during his leisure moments in order to see that the wheels are running smoothly, or to indicate to pupils and teachers



that he is "on the job." To be effective, the unannounced visit must be purposive. Obviously, it must center upon a definite supervisory problem. For example, the supervisor may be concerned with coördinating the work of various grades or in various fields of activity, with the problem of securing adequate information for a plan of intervisitation, or with a host of other problems which do not center upon immediate teacher problems. In these cases, the presence of a definite problem guarantees purposiveness, and thus requires careful planning in advance.

It must be admitted, however, that the unannounced visit is quite inadequate to meet all the problems which confront the supervisor and teacher. The most helpful contacts will come in response to mutual problems which are discussed in advance of visitation and which thus afford the basis for the visit. If a genuine coöperative relationship exists between the teacher and supervisor, there will be many occasions when the teacher will ask the supervisor to be present at a given period or activity, not for the express purpose of securing a diagnosis by an expert, but rather in order to utilize the unique contribution which the supervisor may make because of his wider contacts and experiences. This affords a convenient example of the visitation-on-call type, yet it takes on a very different character from that which prevails under the "expert" conception discussed earlier in the chapter.

The definite problem may likewise be the basis for the legitimate use of the announced type of visitation. The teacher is confronted with a problem which he discusses with the supervisor. Usually this calls for a later classroom visit. The supervisor suggests a possible time for this visit in accordance with his fixed appointments. Later follow-up visits may be arranged for in this manner. It may even be defensible under these circumstances for the teacher to change his program somewhat in order to afford

a crucial illustration of the problem which is being attacked. This is quite different from the customary use of the announced visit in carrying out a supervisory program remote from the immediate problems of the teacher.

The foregoing discussion suggests that the plan of following a definitely arranged schedule of visits, either announced or unannounced, violates the principle that visitation should, in general, be based upon definite problems. The busy supervisor usually finds that so much of his time must be devoted to meeting the individual problems of the teachers, or the mutual problems upon which both are constantly at work, that to follow a fixed schedule would result in the neglect of vital aspects of his work. However, good supervisory planning requires that there be a careful budgeting of time in such a manner as to provide for those activities which can be foreseen and consequently arranged for in advance. Otherwise, the supervisor finds himself hopelessly engrossed in detail. While this preliminary budgeting is extremely important, it does not follow that an elaborate system of scheduling be developed. To do so really tends to defeat the purposes of supervision.

The program which we advocate provides for the intelligent use of all of these various plans of visitation which have been discussed. However, their use is subordinated to the more important consideration of the purposes of the supervisory visit. When visitation is regarded as a vital instrument in stimulating teacher growth, it requires a reëxamination of the conventional modes of procedure. Types of visitation become less formal and tend to blend into a plan which takes into account all the factors involved and which takes its point of departure from the concrete situations in which both the teacher and supervisor are intimately concerned.

The fact that teachers vary in their preparation, professional zeal, and general attitude toward their coworkers

must, of course, be taken into account by the supervisor. Obviously, poorly trained teachers with little experience will require closer supervision and, consequently, more frequent visitation than the experienced teacher with adequate training. Likewise, the teacher whose attitude toward his coworkers, or the profession in general, is not such as to invite coöperation in the solution of common problems will require very different treatment from that accorded a teacher who has developed a genuine social philosophy. While in both cases the individual aspect of growth must be fostered, the supervisor who is a genuine leader will find it necessary to deal with both teachers upon a strictly individual basis, using such means as are at his command to induce changed attitudes. The necessity for the recognition of these individual differences is further evidence that the plan of visitation must at all times be flexible.

At least some of the difficulties in visitation grow out of the very formal conception of the teaching and learning process. With seats and desks arranged in straight rows facing the teacher's desk, with one hundred percent attention demanded as the teacher speaks or questions, the problems relating to the manner in which the supervisor enters the room,<sup>7</sup> where he sits, whether or not he takes notes, whether he interrupts the teacher or pupils, whether he stays the entire period, or the manner of his leaving, are of paramount importance. The atmosphere of such a classroom is tense. There is a certain amount of distraction due to the presence of the supervisor, especially if his visit is of the inspectorial type.

These problems are usually not significant in the more progressive schools which are conducted on the laboratory

<sup>7</sup> One writer commends the practice of having the supervisor join the children on the playground and enter the room with them, in order to make the pupils look upon him as one of the group.

basis. "Pin drop" order is no longer wanted. The teacher is no longer the center of attention. The criterion of effectiveness becomes the accomplishments of the pupils as they go about their work in an informal manner. The supervisor may enter the room barely noticed by either pupils or teacher. He may participate in the many and varied activities and leave with little or no interruption. Such problems as are suggested above drop entirely out of the picture.

Another major problem which confronts the supervisor is the use of various techniques in planning and carrying into effect the program of visitation. A large number of schemes have been advocated to be used in analyzing and evaluating the work of the teacher. Basically they are all much alike, varying chiefly with respect to the attempt which they make to evaluate the work observed.

By far the most common of these devices is the checking list, one of the most elaborate of which is that devised by Franklin Johnson<sup>8</sup> in cooperation with a group of experienced teachers. As indicated in the previous chapter, it attempts to analyze the most significant elements of good teaching. These are divided into three general groupings as follows: (a) classroom management, (b) selection and arrangement of subject matter, and (c) the recitation. Under each of these main headings are a number of questions covering in detail the standards of good teaching. If a particular trait or activity is in evidence, the supervisor assigns the grade of A, B, or C; otherwise he checks the first column.

A part of the section devoted to "the recitation" is reproduced on page 183.<sup>9</sup>

<sup>8</sup> Johnson, Franklin, *The Administration and Supervision of Instruction*, pp. 346-356. Ginn and Company. Copies of this checking list may be secured from the Bureau of Publications, Teachers College, Columbia University.

<sup>9</sup> *Ibid.*, p. 354.

C. Teaching Devices	No	A	B	C	Remarks
1. Were all pupils kept busy during the entire period?					
2. Was there proper balance between teacher activity and pupil activity?					
3. Was emphasis placed upon the formation of habits rather than upon the acquisition of facts?					
4. Was the proper amount of drill given to secure mastery of necessary skills and facts?					
5. Was the drill interesting and participated in by all?					
6. Was the number of questions asked during the period such as would give the best results?					
7. Were the questions well distributed among the members of the group?					
8. Were the questions correct in technique ("yes" or "no" questions, repeating question or answer, addressing questions to group, etc.)?					
9. Were the questions well expressed?					
10. Did the pupils ask questions indicating spontaneous interest?					
11. Was sufficient emphasis given to questions requiring thought in contrast to those requiring only information?					
12. Did the pupils show that they had been taught how to attack and solve a problem?					

C. Teaching Devices	No	A	B	C	Remarks
13. Did the questions follow in orderly sequence?					
14. Did the pupils show ability to give well-developed topical responses to questions requiring such answers?					

Johnson recommends the use of his checking list as follows:

Such a checking list can be made most valuable by placing copies in the hands of each teacher and asking each to check himself on the various items. The principal himself should similarly check his teachers. It is, of course, unwise for him to do this while actually observing teachers at work, as this procedure would prove a hindrance to both supervisor and teacher. Its chief value lies in the objectiveness which it gives to observation and to the interview with the teacher which follows.<sup>10</sup>

A plan designed to serve the same purpose, though fundamentally different in its approach and use, is advocated by H. W. Nutt.<sup>11</sup> The supervisor uses a blank which is divided into two parallel columns as follows: (1) procedure, and (2) results. Upon this blank he records as nearly as possible everything of significance which happens during the period, together with comments as to effectiveness. This procedure requires that the supervisor spend practically the entire period in recording the teacher's questions, the pupils' responses, and his own critical comments upon the general situation.<sup>12</sup>

<sup>10</sup> Johnson, Franklin, *The Administration and Supervision of Instruction*, p. 347.

<sup>11</sup> *Current Problems in the Supervision of Instruction*, Ch. XIII. Johnson Publishing Company.

<sup>12</sup> It should be noted that this procedure is condemned by Johnson, who believes that even using a checking list during the period is a hindrance to both supervisor and teacher.

The following is an example of the use of this plan in an actual teaching situation:

SEVENTH-GRADE ARITHMETIC<sup>13</sup>

December 18

<i>Procedure</i>	<i>Results</i>
T: How many did not get the problems on page 223?	All hands show.
T: How many did not get the problems on page 226?	Hands show some trouble.
Teacher solves one problem by asking leading questions.	
Teacher sends class to board with books and instructions to solve problems they <i>did not get</i> and then to go on with the list.	All but one begin at once.
While pupils work, teacher writes a further list on board for drill; then passes about, helping by asking leading questions.	All busy during drill period. Only few need help of teacher.
Teacher stops the work and sends class to seats.	Class worked at board during whole period.
Assignment:	
T: Solve problems on pages indicated that you did not get.	
Teacher asks a few review questions on the day's work until second bell rings.	Pupils are slow to respond.

This report is made out in duplicate, one copy of which is handed to the teacher at the close of the period. These "objective data" are then analyzed by both the teacher and supervisor, and are made the basis for a later conference.

The extreme form of the procedure proposed by Nutt is to employ a trained secretary to take complete stenographic notes on the entire recitation which is being observed. A copy of this record is given to the teacher and is made the

<sup>13</sup> *Ibid.*, p. 405.

basis for a later conference. This plan has the enthusiastic support of Kyte,<sup>14</sup> who has experimented with it for a number of years. He is not certain, however, that the "cost is justified in terms of the growth produced in the teacher." He suggests experimentation to demonstrate its effectiveness.

Some supervisors who advocate the written-report procedure follow the more informal plan of giving the teacher a brief statement covering the general points observed. The following is an example of this type of report:

The head of the language department, after visiting a class, placed the following report in the hands of the teacher, pending a conference with her.

SUPERVISOR'S REPORT  
(Head of Department)

*Teacher:* Mrs. B  
*Group:* 8 B

*Date:* October 17, 1929.

*Entered:* 12:30

*Left:* 1:15

*Type of Lesson:* General Language. Developmental type showing growth of written communication. Interest of pupils much better than on previous visits.

*Activity of Pupils:* Class atmosphere much more wholesome than on any previous visit. I believe this is due to better planning of work and more preparation. Pupil effort much more intense. I still wonder if the work is making sufficient demands on these pupils.

*Teacher's Part in Lesson:* It always seems to me that this type of lesson should involve more demands on pupils. I would substitute preparation, reading, and research in place of volunteer suggestions. Teacher is getting more and better material to aid in instruction than on previous visits.

*Is conference suggested to teacher?:* Yes — October 17, 1929.

*Signed:* R. A. W. — Head of Department.<sup>15</sup>

<sup>14</sup> Kyte, George C., *How to Supervise*, pp. 149-250.

<sup>15</sup> *The Superintendent Surveys Supervision*, The Department of Superintendence, Eighth Yearbook, p. 318.



A slight variation from the above type illustrates in a very striking manner the technique of the written report used as the basis for the conference. It at least leaves nothing to be desired by way of thoroughness and definiteness! It was made upon the basis of several visits in which was revealed a "complaining" attitude on the part of the teacher because of poor working conditions. This report is by the Head of the Department of Physical Training in a Senior High School to a "complaining teacher."

*Class Organization and Instruction:*

1. Use section register to locate every boy in physical education — swimming, drill, athletics, and as to grade of work.
2. Procedure to eliminate wasted effort and time:
  - (a) Be in dressing room to meet classes as they enter.
  - (b) Attempt to reduce time of preparation of students for work to a minimum.
  - (c) Use student leaders efficiently.
  - (d) Close class promptly at bell to permit of orderly procedure and care for equipment.
3. Class preparation by teacher:
  - (a) Minimum essentials of course of study to be carefully outlined for the semester to suit your conditions.
  - (b) Weekly program to be planned thoroughly, a copy of which must be in the physical director's office Monday morning.
  - (c) Squad leaders' training must be definitely planned. (Absolutely essential to conduct large classes and meet the needs of individuals as well as possible.)
  - (d) Provide that material to be used by class is on hand, courts marked, and squad records available.
4. Training of leaders:
  - (a) Meet classes every Monday morning at 8:10 A.M.
  - (b) Use boys as leaders who can make this class.
  - (c) Instruct leaders in: methods of squad management; understandings and abilities involved in the games, stunts, and athletics; and attitude of responsibility.

*General Matters:*

Ratings to be more than mere credit for attendance.

Keep physical director's office free from loafing boys.

Office and department rooms to be kept clean and orderly.

Bulletin boards, score cards, charts, records, to be efficiently used.

Fees, ordering of equipment, to be systematic.

Study in detail the course of study.<sup>18</sup>

The supervisor remarks significantly that the conference which followed this written report "resulted in the teacher's acceptance of suggestions the supervisor made and in addition he (the teacher) made observations of a helpful nature. There seems to be an effort on his part to develop a better attitude toward his work."

The basic objection to the written report as a supervisory device is that it violates one of the fundamental principles of coöperative supervision. As has been repeatedly suggested, the teacher and supervisor must have equal opportunity to contribute to the solution of common problems. The full and free exchange of viewpoints is absolutely indispensable to growth on the part of both teacher and supervisor. The written report of visitation usually ignores this important principle. The result is lack of confidence and a perpetuation of the autocratic conception of supervision. The supervisor forms and states his judgments with an air of finality. For example, in the above report the supervisor gives orders intended to correct the difficulties observed. "Coöperation" consists in following these orders. In other words, the teacher does all the coöperating. It is little wonder that the conference which followed such a report "resulted in the teacher's acceptance of suggestions the supervisor made." It is far from apparent that there was any choice in the matter.

<sup>18</sup> *The Superintendent Surveys Supervision*, The Department of Superintendence, Eighth Yearbook, pp. 326-327.

Even in the reports of milder tone, in which the supervisor compliments the teacher on certain phases and expresses opinions as to the procedures which should be followed, the situation is essentially the same. Instead of judgments being formed *after* a careful analysis of data, they are formed without any consideration whatever for the contributions which the teacher may have been able to make. The supervisor who cannot learn from the teacher even when contributing to the growth of the latter has indeed lost his own capacity for development.

The checking list as illustrated above is open to the same objection. Even though the standards upon which the list of questions are based are arrived at coöperatively (and usually they are not), the implication is clear that they are quite objective in character and that the answers are consequently open to but one interpretation — that of the supervisor. This is far from the case. Individuals will differ materially in their appraisal of the worth of any situation covered by any one of the questions. Obviously, to ignore the teacher's interpretation is to reach a judgment upon the basis of only partial data.

It may be argued that the teacher has the opportunity to express her judgment in the conference which is supposed to follow. Even though this may be true, it fails to meet the conditions set forth above. Moreover, the teacher is very apt to be placed on the defensive by adverse criticism in the report, so that the conference resolves itself into a debate with the supervisor upon questions which never would have arisen had there been an opportunity for a full exchange of ideas *before* conclusions were reached.

The technique proposed by Nutt and illustrated above is perhaps less objectionable on these grounds, at least when the "analysis" is made by the teacher and supervisor together. However, he says that in some cases "the teacher was given a copy of the data at the close of the period and

she was asked to analyze the situation before the conference was held. The teacher wrote out her analysis of the situation and the supervisor did the same. These analyses were compared in the conference and the problems were frankly discussed." <sup>17</sup>

Here the mistake is made in assuming that the analyses are both made from the same data. As a matter of fact, the analyses are probably more often made upon the basis of material which does not appear upon the data sheet at all. The supervisor brings to bear his background of experience with this particular teacher and his own standards of good teaching in selecting elements which he notes on the data sheet. The teacher, in interpreting the data, reads into it many elements which do not appear in the supervisor's report. The result is that, while the report of the supervisor has the appearance of objectivity, it is in reality subjective in character as well as an incomplete picture of the situation. The resulting analyses, when made without previous discussion, are open to precisely the same objections as the other plans discussed.

Aside from this objection, the question may well be raised as to whether the supervisor might not make better use of his time than in attempting to record a large number of questions, answers, and observations. If this sort of record is desirable, then it would seem wise to adopt Kyte's policy and secure a complete stenographic record. This would make it possible for the supervisor to give attention to significant factors. However, it is open to question whether a complete record is essential. If the supervisor is well trained for his job, he centers upon those phases of the learning activity which have a definite bearing upon the particular problem which he has in view. The details instead of proving helpful, tend to obscure the issues.

Why then are written reports of visits insisted upon by

<sup>17</sup> Nutt, H. W., *op. cit.*, p. 282.

supervisors?<sup>18</sup> The answer is not difficult to discover. One argument which is frequently advanced is that such reports, especially when made in the form of an analysis of various phases of the procedure, add definiteness and objectivity and provide the supervisor with standards of judgment. If the objectives of the visit were inspection and appraisal, rather than the promotion of better learning conditions and the stimulation of teacher growth, no doubt the argument would be valid. Insistence upon analysis and appraisal of the work of the teacher, as has been pointed out, tends to erect a barrier between the supervisor and the teacher. The teacher feels that he must, at any cost, make a good impression so that the written report will be favorable. Hence the friendly attitude which is so essential to good supervision is destroyed because the supervisor worships the fetish of objectivity and definiteness.

A second look at the device should convince the most skeptical that it is not needed for the purpose of giving point and definiteness to the supervisory visit. On the contrary, it becomes an obstacle in the path of the supervisor for it tends to emphasize the entire range of performance, rather than the particular area where assistance is needed. The necessary definiteness is secured when tentative standards of good learning and teaching, arrived at coöperatively by the teaching staff, are incorporated in the activities of both teachers and supervisors, as dynamic ideas which find expression in conduct. The appropriate standard is then

<sup>18</sup> This discussion has no reference to the supervisory practice of taking a few notes on the visit for the purpose of refreshing one's memory. Some supervisors find it necessary to do this while others are able to remember significant elements without these reminders. After all, this is a personal matter which each supervisor must settle for himself. It has little or nothing to do with a discussion of supervisory devices. It should be pointed out, however, that when such a practice is found to be necessary, it is usually less distracting to make such notations *after* visits, rather than while the visit is in progress.

brought to bear upon the given situation, by utilizing it as a suggestion or hypothesis in the solution of problems. Standards must indeed be external if it is necessary to have them carefully organized and printed, for use at each visit of the supervisor, in order to save him from being indefinite.

It has been said that human beings often have both *good* reasons and *real* reasons for their actions. Doubtless the reason for using score cards suggested above appears as a *good* one. Frequently the real reason is the fear on the part of the supervisor that he will not "get his ideas over to the teacher" unless he writes them out. He has little faith in the ability of the teachers to contribute anything to the evaluation. Then, too, it gives him a feeling of efficiency, and covers up the disconcerting sense of having failed to "help the teacher." A well-filled office file of visitation reports setting forth suggestions for teacher improvement frequently does much to compensate for a supervisor's inferiority complex.

It is, of course, desirable to have some written record of progress which has been made. This record, however, should be made *after* the supervisory conference rather than before. It should be brief and informal in nature and should not be regarded as a device for supervisory visitation. It is a sort of cumulative record in which conclusions, coöperatively arrived at, are set down. Such records are an aid to the supervisor in making plans for further work with the teacher.

We conclude, then, that classroom visitation should be regarded as but one phase of a complete supervisory program, and that accordingly it must not receive emphasis at the expense of coöperative supervision through individual and group activities.

We conclude further that the plan of visitation should be determined in the light of the purpose which visitation is to serve. Since this is primarily the stimulation of growth,

rather than the analysis of traits and trait actions, it follows that attention should be centered upon the particular problems under consideration. Rigid plans which place much emphasis upon "fact-finding," and which center undue attention upon *general* diagnosis, should give way to an informal policy in which the particular method or procedure to be followed grows out of the nature of the particular learning situation.

In our next chapter, we shall turn our attention to the individual conference, which should be an important phase of every supervisory program.

### ADDITIONAL READINGS

For references, see conclusion of Chapter X.

## CHAPTER X

### THE INDIVIDUAL CONFERENCE

Since the supervisory visit is usually only the starting point for stimulating teacher growth, it follows that individual conferences must form an indispensable part of the supervisor's program. Otherwise visitation is reduced to the level of mere inspection. The conference between the teacher and the supervisor affords the opportunity *par excellence* for raising the level of learning and teaching.

To say that it is little used is a sad commentary upon present supervisory practice. That this appears to be the case is suggested by the following statement:

This activity [conferences with individual teachers] receives high rank from practically all groups. While nearly all supervisory groups indicate considerable use of conferences, they do not receive emphasis in proportion to the value which is assigned to them. Particularly is this true in terms of the reports of teachers. The teachers in these ten Minnesota school systems rank this activity very high in value, but less than 20 per cent of them report that it is much emphasized. One wonders to what extent the supervisor may be misled concerning the emphasis which he gives this activity. He may make a remark or two to a teacher following visitation and feel that it is a "conference." The teacher, however, may not feel that this is a really helpful conference; hence the disparity in reports. . . . Much has been said about the importance of the conference in the literature on supervision. The data here presented would seem to indicate that practice in connection with the conference is in need of critical examination both as to the extent of its use and as to its effective administration.<sup>1</sup>

<sup>1</sup> Melby, E. O., *op. cit.*, pp. 114-115.



The findings of other investigators tend to confirm Melby's conclusion. For example, Trabue points out the significant fact that only 13 principals out of a total of 130 "do anything at all about a lesson that has been observed,"<sup>2</sup> and Hughes,<sup>3</sup> investigating high-school supervision, reports that 68 per cent of the teachers reporting received no suggestion whatever from supervisors, principals, or other officers concerning their work.

The partial explanation of the gross neglect in the use of this supervisory instrument is no doubt to be found in the fact that supervision under the objective or scientific conception has been concerned principally with *fact-finding* procedures. The supervisor with his "kit of tools" devotes his time to measuring teacher traits and pupil achievements to the neglect of more important functions. Frequently, the written report or the score-card rating, left with the teacher at the close of the visit, is used as a substitute for the personal conference.<sup>4</sup> In other cases, the supervisor, due to lack of time or to a feeling of incompetency in conducting personal conferences, holds general teachers' meetings after visits to a building at which he discusses in general terms the situations which he has discovered, in the hope that the teachers who have been guilty of the mistakes which are cited will accept the suggestions offered. In still other cases, the failure to hold personal conferences is no doubt due to sheer indifference and neglect. Whatever may be the explanation of this failure to utilize one of the most valuable means of improving teachers, the

<sup>2</sup> Trabue, M. R., *op. cit.*, p. 130.

<sup>3</sup> Hughes, J. M., "A Study of High School Supervision," *School Review*, XXXIV (February, 1926), p. 112.

<sup>4</sup> Perrin found that out of 60 replies to a questionnaire addressed to supervisors in cities of various sizes, 32 indicated that the supervisors "leave written criticisms for the teacher." See Perrin, Ambrose H., "The Local Status and Activities of General Supervisors in City Schools," *Elementary School Journal*, XXVI (January, 1926), pp. 345-356.

facts present a challenge to those in charge of school systems. If it is true, as a well-known superintendent recently stated, that where one supervisor could be found who actually raised the level of teacher and pupil performance, thirty could be found who were satisfied to be mere checkers of results, then we need to examine critically our supervisory programs.

In general we may distinguish between two types of individual conferences. The first one, the importance of which is generally underrated, grows out of either a teaching or a supervisory problem which has no connection with observed classroom work. The teacher, for example, is in doubt as to the advisability of experimenting with a certain type of individualized instruction. He seeks out the supervisor for the purpose of securing his judgment upon the proposed plan. The conference which results, being based upon a definite problem, provides an excellent opportunity for the mutual exchange of ideas. The second, and by far the most common type, is the individual conference which follows a supervisory visit. The purpose of both types is fundamentally the same, stimulation of growth. The latter frequently resolves itself into an interview with the teacher for the purpose of *telling him* the strong and weak points in his procedure. It is this "fact-presenting" attitude which, on the one hand, has caused many supervisors to feel that the conference is by far the most difficult of all supervisory procedures, and on the other hand, has caused many teachers to regard them as evils which are to be avoided if possible. Since principles underlying both types of conferences are identical, it is not necessary to separate them for purposes of discussion.

First of all, the individual conference should be planned and carried out in a manner which invites the fullest coöperation. The manner of arranging for the conference, though in fact a trivial matter, has important implications

which must be taken into account. Some supervisors follow the plan of sending out form notices to teachers to appear on a certain day and hour for conferences. This procedure has the appearance of a summons to appear in court, and, especially in the case of the inexperienced or timid teacher, frequently results in creating a tenseness which may interfere with the desired coöperative relationship. A more serious objection to this procedure is the fact that it is not possible, even with extensive explanations, to set forth adequately the problems to be taken up. This point will be discussed later.

Another plan of arranging for the conference, which is also open to criticism, requires that the *teacher* make arrangement with the supervisor for a conference after each supervisory visit. In one school system it is reported that this plan was put into operation as follows: The superintendent announced at a general teachers' meeting that he expected to hold a conference in connection with each supervisory visit. Since frequently it was not convenient to hold this conference immediately after the visit, he proposed that the teachers report to his office for conference as soon as possible after each visit. Obviously this procedure resulted in a saving of time on the part of the supervisor, but it neglected some very vital factors. In the first place, it is open to the same objection as the plan cited above, in that it stresses an implied inequality between supervisor and teacher. In the second place, it makes no provision for a definition of the problems to be discussed at the subsequent conference. The teacher comes into the conference quite unprepared to discuss the crucial issues.

If the conference is based upon a supervisory visit, the supervisor and teacher should discuss briefly at the close of the visit, if possible, some of the vital issues involved and arrange for a conference at a time and place convenient to

both parties. In this manner the way is paved for an informal purposive conference which is entirely free from the stress and strain which often result when more formal procedures are used. Where the conference is not based upon a supervisory visit, the preliminary arrangement will of necessity include at least a brief discussion of problems. This makes possible adequate preparation by both the supervisor and teacher.

Obviously the hurried conference immediately at the close of the visit, which usually takes place in the presence of the pupils, is of little value and may even be capable of much harm. The worth-while conference requires a freedom from distracting elements which is not possible under such circumstances. The "genial" supervisor who bestows his few words of praise as he rushes to his next appointment may create a wholesome "atmosphere," but he does little to improve instruction. What is needed is a carefully planned conference which is suggestive of deliberation, open-mindedness, and suspended judgment.

A requirement that is frequently accepted in theory but violated in practice is that the individual conference should center upon a major problem concerned primarily with the directing of learning activities, rather than upon teacher traits and activities.

The present emphasis upon "fact-finding and trait analysis"<sup>5</sup> in visitation, which was noted in the preceding chapter, has encouraged as a correlate a corresponding emphasis upon these elements in the individual conference. Most of the checking lists and rating blanks used in visitation

<sup>5</sup> Symonds made an analysis of the items appearing upon 31 rating scales and score cards and found that there were about 32 items in common use. Of these, 14 related to personal qualities, 3 to pupil responses, and the remainder to discipline, teaching skill, scholarship, professional training, and so forth. See Symonds, Percival M., "The Measurement of Teaching Efficiency in High School," *Educational Administration and Supervision*, XIII (April, 1927), pp. 217-231.

include many items dealing with personal and professional traits and trait actions, and it is probable that such items, being more easily observed, are stressed even more than is indicated by their relative space allotment upon the blanks. A recent investigation by Shannon<sup>6</sup> tends to support this conclusion. He made an analysis of the observation notes made by critic teachers in teacher training institutions and supervisors in regular school systems for the purpose of determining the relative emphasis placed upon personal and social traits of teachers and teacher and pupil activities. The data cover more than 1400 observations. Since these supervisory notes were, in all probability, used as the basis for individual conferences, the results are significant in determining the present practice with respect to the items emphasized in visitation and conference.

The various traits and activities, either expressly mentioned or implied, were analyzed with reference to the "frequency of criticisms and suggestions," so that we have an index of the relative importance, from the point of view of the supervisors, of the various items. Fifty-five teacher and pupil activities and 52 personal and social traits are listed. The tables on pages 200-203 are from this study.

A study of the activities indicates that relatively little attention was given directly to *pupil* activities, and of these such items as "use of blackboard by pupils," "attending to posture of pupils," and "making pupils work" are far more common than those dealing with the achievement of learning products. Doubtless the activities mentioned have under certain conditions very direct effects upon learning conditions and on that account are subject to direction by the supervisor, but the emphasis seems to indicate that the

<sup>6</sup>Shannon, J. R., "An Analysis of High School Supervisory Notes," *Educational Administration and Supervision*, XIV (January, 1928), pp. 9-14. (Note: The data do not indicate whether or not checking lists or rating blanks were used by the supervisors as a basis for these notes.)

ACTIVITIES CONSIDERED IN SUPERVISORY NOTES<sup>7</sup>

Activities	Frequencies of criticisms and suggestions		
	Positive	Negative	Total
1. Questioning . . . . .	114	535	649
2. Lesson planning. . . . .	119	339	458
3. Making assignments . . . . .	169	195	364
4. Discipline and classroom management . . . . .	45	179	224
5. Teachers' knowledge of subject . . . . .	17	176	193
6. Special technique of various subjects . . . . .	53	121	174
7. Complete mastery of subjects by class . . . . .	26	117	143
8. Drill . . . . .	64	74	138
9. Testing . . . . .	66	65	131
10. Making pupils work . . . . .	23	101	124
11. Supervised study . . . . .	43	79	122
12. Use of illustrations . . . . .	50	64	114
13. Attention to individual differences . . . . .	22	92	114
14. Economy of time . . . . .	28	84	112
15. Aims and choice of subject matter . . . . .	26	83	109
16. Results . . . . .	83	23	106
17. Use of blackboard by teacher . . . . .	33	57	90
18. Reviews . . . . .	44	36	80
19. Attention to pupils' English . . . . .	10	69	79
20. Effectiveness of pupils' expression . . . . .	10	67	77
21. Developing independence in pupils . . . . .	10	61	71
22. Detecting pupils' errors . . . . .	2	62	64
23. Teacher keeping self in background . . . . .	8	55	63
24. Housekeeping . . . . .	3	55	58
25. Attention to pupils' questions. . . . .	10	42	52

<sup>7</sup> Shannon, J. R., "An Analysis of High School Supervisory Notes," *Educational Administration and Supervision*, XIV (January, 1928), p. 12.

Activities	Frequencies of criticisms and suggestions		
	<i>Positive</i>	<i>Negative</i>	<i>Total</i>
26. Mastering names of pupils . . . . .	12	38	50
27. Introducing supplementary material . . . . .	31	18	49
28. Lecture-demonstration procedure. . . . .	15	30	45
29. Executing lesson plans . . . . .	11	33	44
30. Attention to by-product learnings . . . . .	9	34	43
31. Teachers' explanations . . . . .	21	20	41
32. Developing appreciation . . . . .	21	19	40
33. Socialized recitation . . . . .	14	24	38
34. Supplementary information by critics . . . . .	..	37	37
35. Summaries . . . . .	13	20	33
36. Attending to posture of pupils . . . . .	4	28	32
37. Developmental lessons . . . . .	13	17	30
38. Requiring neatness of pupils . . . . .	3	25	28
39. Fitting recitations into allotted time. . . . .	1	20	21
40. Unity and coherence of recitations . . . . .	4	16	20
41. Use of blackboard by pupils . . . . .	1	18	19
42. Reconciling pupils to their mistakes . . . . .	3	10	13
43. Diagnosing pupils' difficulties . . . . .	3	7	10
44. Teachers' handwriting . . . . .	..	9	9
45. Marking work of pupils . . . . .	..	9	9
46. Capitalizing pupils' past experiences . . . . .	2	6	8
47. Introduction to recitation . . . . .	1	3	4
48. Capitalizing pupils' errors . . . . .	2	1	3
49. Attention to pupil hygiene . . . . .	..	3	3
50. Standards of attainment . . . . .	..	3	3 -
51. Dramatizations . . . . .	2	1	3
52. Economy of materials . . . . .	1	1	2
53. Topical recitation . . . . .	..	1	1
54. Project method . . . . .	1	..	1
55. Conclusion of recitation . . . . .	..	1	1

PERSONAL AND SOCIAL TRAITS FOUND MENTIONED OR CLEARLY  
IMPLIED IN SUPERVISORY NOTES<sup>a</sup>

Traits	Frequencies of criticisms and suggestions		
	Positive	Negative	Total
1. Attentiveness to own use of English. . . . .	4	196	200
2. Stimulative power . . . . .	123	63	186
3. Voice . . . . .	81	103	184
4. Alertness . . . . .	30	148	178
5. Self-control . . . . .	90	85	175
6. Enthusiasm . . . . .	15	55	70
7. Resourcefulness . . . . .	27	29	56
8. Self-confidence . . . . .	7	40	47
9. Accuracy. . . . .	8	36	44
10. Power of expression . . . . .	4	40	44
11. Sympathy . . . . .	28	15	43
12. Enunciation . . . . .	14	20	34
13. Forcefulness . . . . .	6	28	34
14. Adaptability. . . . .	7	23	30
15. Affability . . . . .	28	2	30
16. Presence commanding attention . . . . .	10	20	30
17. Industriousness . . . . .	17	12	29
18. Activeness . . . . .	9	17	26
19. Earnestness . . . . .	23	3	26
20. Courage . . . . .	5	20	25
21. Reserve . . . . .	2	21	23
22. Animation . . . . .	7	15	22
23. Executive ability . . . . .	2	16	18
24. Facial expression . . . . .	7	11	18
25. Orderliness . . . . .	9	9	18

<sup>a</sup> Shannon, J. R., "An Analysis of High School Supervisory Notes," *Educational Administration and Supervision*, XIV (January, 1928), p. 13.



Traits	Frequencies of criticisms and suggestions		
	<i>Positive</i>	<i>Negative</i>	<i>Total</i>
26. Judgment . . . . .	4	11	15
27. Posture . . . . .	3	11	14
28. Personal appearance . . . . .	4	7	11
29. Poise . . . . .	8	3	11
30. Dignity . . . . .	2	8	10
31. Patience . . . . .	6	4	10
32. Open-mindedness . . . . .	9	..	9
33. Propriety in dress . . . . .	5	4	9
34. Punctuality . . . . .	1	8	9
35. Originality . . . . .	3	5	8
36. Neatness . . . . .	3	4	7
37. Reliability . . . . .	6	1	7
38. Sense of humor . . . . .	6	1	7
39. Health . . . . .	3	3	6
40. Initiative . . . . .	1	5	6
41. Foresight . . . . .	3	2	5
42. Practicability . . . . .	2	3	5
43. Ingenuity . . . . .	4	..	4
44. Manners . . . . .	4	..	4
45. Breadth of interest and information . . . . .	2	1	3
46. Cleanliness in person . . . . .	..	2	2
47. Fairness . . . . .	..	2	2
48. Frankness . . . . .	2	..	2
49. Intelligence . . . . .	2	..	2
50. Thriftiness . . . . .	..	2	2
51. Optimism . . . . .	..	1	1
52. Walk . . . . .	..	1	1

activities of the *teacher* received primary consideration, rather than those of the *pupils*. Certainly there is little to indicate that the problems involved in pupil growth afforded the basis for the supervisory activities.

A few examples of this direct emphasis upon teacher activities will perhaps serve to clarify the point. Many supervisors who insist upon written lesson plans require that these plans be kept on the teacher's desk at all times. On visiting the room the supervisor examines the plan book. If it is found to be deficient, such deficiency may be made the basis of a later conference. This failure to meet the specifications for a good lesson plan may or may not be evident in the functioning of the learning process. The supervisor, in other words, should infer good or poor planning, not from an examination of the plan book, but from the learning situation. Only in this manner is it possible to avoid making the teacher, rather than the pupils, the center of the stage. Again, evidence of good or poor questioning should be gathered from the activities of the pupils in solving their problems and from a consideration of the teacher's aims, rather than from the exact analysis of the questions asked by the teacher. Making assignments is another case in point. In some schools the teacher is required to make the assignment at the beginning of the hour, in others at the close. Frequently the procedure is so mechanized that a bell indicates that it is time for the teacher to make the assignment. Now the assignment should always take its cue from the learning process itself and not from external requirements. Under the unit procedure, the assignment is completed "when the learner has identified himself with the task." This may take five minutes or several periods, depending entirely upon the circumstances. Its adequacy must be determined with reference to the direction needed by the pupils, and not by any specifications which may be set up.

The list of "personal and social traits" referred to above indicates that a major emphasis was given to such items as "voice," "enthusiasm," "sympathy," and "forcefulness." There is no evidence that the activities of pupils afforded the basis for this wholesale listing of traits. On the contrary, it is altogether probable that they were considered in an abstract manner and appraised with reference to their *possible*, rather than their actual, effect upon the learning situation. Teacher traits, like activities, become significant when they function in the learning process. A case in point is the trait known as "personal appearance." At best this is a very vague and elusive term, which includes such items as dress and neatness. The supervisor who comes into the situation with the "teacher appraisal" attitude will find himself attempting to judge these items apart from the learning situation with reference to some external standard. The result is a curious and dangerous distortion of the relative significance of this factor.

In addition to the serious errors in appraisal which inevitably result from the emphasis upon teacher, rather than pupil, activity, the effect of such a procedure upon the teacher-supervisor relationship is a problem of even greater importance. Let us illustrate. When the conference centers upon teacher activities and traits, the teacher is immediately placed upon the defensive. He must explain why he is not more sympathetic, why he does not show more self-confidence, why his lesson plans are not in better order. He sees that the supervisory visits are concerned primarily with *studying his activities* and, as a consequence, he comes to fear the visits and conferences of the supervisor, because he realizes that they mean personal criticisms — perhaps tactfully presented by calling attention to the "strong" points first!

When the *learning situation*, of which both teacher and supervisor are a part, is taken as the basis for the confer-

ence, the situation is entirely changed. Now the center of attention is pupil activity. The acquisition of learning products, such as ability to utilize data in the solution of problems, the ideals of coöperation and helpfulness which are indicated, the arrests in growth which are evidenced by the attempts of the teacher at measuring achievement, become the dominating factors. These may all be discussed in a truly impersonal manner, for both the teacher and the supervisor are looking at the *same* situation from slightly different points of view. There is no attempt at defense or fear of injured feelings, for are not both the teacher and the supervisor concerned with precisely the same problem — pupil growth?

Now it must be admitted that a diagnosis of pupil activities may point in the direction of unsatisfactory methods of procedure and indications of undesirable traits, but this is always a secondary reference rather than a primary one. The teacher and supervisor, casting about for the reasons why more thinking is not in evidence on the part of the pupils, may hit upon the suggestion that it is due to the form of the questions. This then becomes a matter of vital concern. Since it is not pronounced as a final judgment but as a hypothesis to be investigated, it lacks the objectionable character which it possesses when made as a direct criticism of the teacher's work. The following example illustrates the procedure which we are proposing:

Miss B had been appointed to teach English in the junior high school the year after her graduation from college. She had had no training except a nominal teachers' course in college with its ten hours of practice teaching. During the first two years as a teacher, she was fortunate in having only academic classes assigned to her. Among her classes at the beginning of her third year was a group of boys taking the technical course. All of these boys who were not utterly indifferent to what went on in the English class were actively opposed to it as an effeminate and sickening waste of

a man's time. To the supervisor it was evident that the class had impressed its valuation of the course upon the teacher. She had lost faith in the possibility of ever making it mean anything to them. This conclusion was not only the result of her own discouraging experience with these pupils; other teachers had told her that most of them were "tough" and "hard-boiled," and the rest lazy and stupid, and she needn't hope to get any work out of them. The boys had reached the stage of resignation to boredom and the teacher of resignation to being balked.

Much of this came out in the first conference with the teacher. Miss B ended her tale of woe with the statement, "In short, these chaps simply haven't any use for anything that goes on here."

"Well," said the supervisor, "let's look at the course of study and see what there is in it that could be of use to these boys if we could win them to accept it. Let us sum up all the desirable things they are doing in school and out, and see what there is in the English course that might help them to do those things better."

The teacher and supervisor found that they had a working knowledge of what these boys did in school, but of what they were doing outside nothing was known. The teacher commissioned herself to discover all she could about the interests and ambitions and hobbies and jobs and sports and reading of these boys. She brought her findings to the next conference. With the supervisor, she analyzed her resources for activities and materials that should enable the boys to go on doing the same things with a finer spirit or a deeper understanding or a better skill. Just how the teacher would relate each unit of English work with the boys' other activities so that one would serve the other was worked out by the teacher with the help of the supervisor. At this point, the need for understanding individual differences in achievement became apparent. It was necessary to discover what part of the work planned for him each boy had already accomplished, and whether he possessed the requisite foundation for achieving what remained to be done. The supervisor and the teacher together made out an inventory test which was intended to reveal to the boys themselves what they had still to accomplish. The supervisor explained the value of letting each boy keep a record of his own progress

from this point forward. The conference ended with the teacher's faith in her ability to interest the boys fully restored.<sup>9</sup>

An analysis of this situation by means of a checking list, or by centering upon traits and activities, would no doubt have revealed many personal and professional deficiencies. The teacher no doubt would have been checked very low on such items as "stimulative power," "forcefulness," "self-confidence," "optimism," and "sense of humor." No doubt some fault might also have been found with her "patience," "animation," and "facial expression." She might have been told that she was not "developing appreciation," "providing for individual differences," or "capitalizing the pupils' past experiences." Certainly she might have been accused justly of having poor "discipline." To center upon such elements is to neglect the fact that traits and frequently procedures grow out of concrete situations, and that in other situations other traits will manifest themselves. The supervisor, visiting the same teacher after the learning difficulty had been removed, would no doubt have commended her for her optimism, animation, and enthusiasm.

In this situation the teacher and supervisor became partners in the solution of a common problem. The conference is merely an opportunity to bring to bear the unique contributions of each. Conducted in this manner, there is no thought of superiority or inferiority, and certainly no need for exercising tact on the part of the supervisor in "getting over" to the teacher a realization of her weak points.

Another requirement of the successful conference is that it be so conducted as to provide the conditions essential to professional growth on the part of both the teacher and the supervisor. As was developed in our discussion of teacher rating and the use of score cards and checking lists in visita-

<sup>9</sup> *The Superintendent Surveys Supervision*, pp. 316-317.

tion, there is danger that the supervisory relationship will be characterized by evaluation and appraisal rather than by helpfulness and mutual growth. When the supervisor hands the teacher a written statement at the close of a period of visitation, setting forth his version of the recitation from the standpoint of technique, traits, and results, and this is used as the basis for an individual conference, the door to the opportunity for carrying out this coöperative relationship is closed. Judgments have been made and nothing remains except to get the teacher to accept them. An excellent example of this type of procedure is cited by William H. Burton. It is taken from a report handed to the teacher.

You set the pupil's problem. What would be a better way? Why better? Does a self-imposed problem need much motivation? You rejected the problem suggested by the class. Was it not in the project? You told them yours was the next *logical* one. What principle of childhood did you violate?

Your unit of presentation was too long. What showed this? Pupils gave a good key-sentence for the unit, but you made no use of it. Why?<sup>10</sup>

It is difficult to conceive of any situation in which the supervisor would be justified in utilizing a report such as is quoted above. The probable effect would be to engender antagonism and ill feeling and to create a distrust of the entire supervisory program. In a conference based upon such a report, the teacher has little chance to contribute. The issues are settled in advance without consulting the teacher. Even though the report might cause the teacher to improve his work from the standpoint of the supervisor,

<sup>10</sup> *Supervision and the Improvement of Teaching*, p. 411. D. Appleton and Company. The author, in commenting upon this report and others of a similar nature, commends them because they "force the teacher to analyze her work in terms of principles. This not only betters her pedagogical background but keeps the discussion impersonal" (p. 412).

yet such vital factors of growth as the development of initiative, ability to meet new situations, and power of self-analysis are entirely lacking.

Had the supervisor, in conference with the teacher, examined the learning situation and discovered that it suffered from an inferior type of motivation and lack of a dominating interest, they could have attacked coöperatively the problem of securing an improvement in learning conditions. This procedure would have presented a challenge to both the teacher and the supervisor which would have resulted in mutual benefit. At the same time the teacher would have been spared the humiliation and the resulting loss of self-confidence which must have followed the receipt of this report.

As suggested above, in order to provide the proper conditions for professional growth, both the teacher and the supervisor must approach the conference with an attitude of open-mindedness and a willingness to examine all available data before reaching conclusions.

Many writers in the field of supervision stress the necessity of adequate preparation for the conference. Frequently this preparation takes the form of a complete analysis of the class period visited, and a listing of the "strong" and "weak" points in the procedure. Kyte,<sup>11</sup> as indicated in the previous chapter, advocates the use of the stenographic report. Upon the basis of this stenographic report, one copy of which is handed to the teacher, together with the notes which the supervisor has taken during the course of the visit, an analysis is made of the recitation under three headings, as follows: (1) "Strong points of the lesson." (2) "Weak points in the lesson." (3) "Doubtful points not clearly understood." Obviously this plan is superior to those which leave no place for a consideration of the teacher's point of view. However, the implication is that if all

<sup>11</sup> Kyte, George C., *op. cit.*, pp. 187-288.



points were clearly understood, then the supervisor could arrive at judgments independently of the teacher.

While it must be admitted that adequate preparation for conferences is necessary, such preparation should not have for its purpose the determination of final judgments of the learning situation, but rather the formulation of crucial issues to be discussed, and possible suggestions to be made. If the conference is held within a reasonable time after the visit, it should not be necessary for the supervisor to reduce to writing more than brief notations.

The inadequacy of the stenographic record, supplemented by such notes as the supervisor may take for purposes of arriving at final judgments, is clearly indicated by the following illustration quoted by Kyte:

He [the supervisor] entered a tenth-grade history classroom at the beginning of the period just in time to hear the teacher begin work. She announced that a certain pupil was going to report on Theodoric the Ostrogoth; so the pupils put away their books. The room became strangely tense. The boy called upon walked to the front of the room without a note or book in his hand. Exhibiting a little embarrassment at the start but with slight hesitation, he began talking about the historical personage in a rather informal but engaging manner. The principal found himself becoming fascinated by the account and noticed that pupils and teacher were relaxing from their tenseness and falling under the spell of the boy's presentation.

The principal was surprised to find that the entire period had slipped by before the student finished his talk. The rest of the class exhibited a mixed feeling of surprise, enjoyment, and appreciation at the conclusion of the talk. Everyone felt that the individual's performance was unquestionably a superior one. As the bell rang, the principal commended the boy on his presentation.

The teacher expressed pleasure over the principal's comment, and said that she wanted to discuss the lesson with him soon. When the principal walked along the corridor, he found the boy in the

center of a group of pupils. They were plying him with questions about how he had learned to "talk that way" and about many points that he had mentioned. Here were splendid points of commendation to make to the teacher, thought the principal. There wasn't much more to add to the comments he had made to the boy in front of the whole class, and the teacher, because they carried the educational implications to be made.

Suddenly he began to wonder if the lesson were not exceedingly weak from two vital standpoints. In the first place, one pupil out of twenty-two had consumed the whole of a class period talking. Secondly, with additional class time which would be given to the discussion of Theodoric, would he not be given stress far beyond his relative importance in history? The longer he pondered over the two points, the more convinced he became of their soundness, and so planned to stress them as the weak points of the lesson. He could not dismiss from his mind, however, a lurking doubt regarding the points.

In the conference, he began leading up to them by asking the teacher, "Did you expect Mat would take up the whole period with his report?" She replied, "No, but I had hoped that he would speak for some time. I thought possibly one other pupil might have a chance to report. You heard what happened."

Before the principal had recovered from his surprise at her response and had rephrased the next question which he had planned to ask her, she began discussing the boy. She had found him shy about entering into class discussions, excepting when his interest was aroused. He had been timid about appearing before his own classmates, even though it was his ambition to become a lawyer some day. She had selected the advanced historical biography for him to read because of his reading ability, and with the hope that his interest would be aroused to the point where he would forget himself and talk to the whole group as he had done for her voluntarily, when he had become keenly interested in a person or an event in history. As her account continued, the principal was thoroughly convinced that her teaching had been sound from the viewpoint of helping the boy.

Then the principal told the teacher what he had seen and heard in the hall, complimenting her upon the results achieved. His

account reminded her of her second purpose in the lesson. She told him about the type of short reports which most of the pupils had either read after writing them or had presented haltingly in their attempts to follow prepared outlines. The performance of the boy would be the best example she could get before the class — a fellow student who was looked upon as unable to talk doing the best of all — for discussion of what others should strive to do. She could point out how full his subject was. By questioning them, she could then convince them how much more they had learned from him than from others. She believed it was worth the time of the lesson to further the improvement of learning by all pupils of the class. When the teacher asked what criticisms the principal had, he frankly told her that any adverse ones he had formulated she had thoroughly shown not applicable. He ended, "You staged the best teaching that I can recall ever observing."<sup>12</sup>

In this situation, as in most others, the data upon which conclusions were to be reached were not complete until the teacher had an opportunity to contribute information as to aims and purposes, as well as an explanation of the full context of the learning situation, of which the observed period was only a part.

The individual conference, then, if it is to result in the maximum growth on the part of both the teacher and supervisor, should be regarded as an opportunity to discuss and solve problems coöperatively. When conducted in this manner, both learn from the experience. The teacher profits because it helps him to solve his individual problems. The supervisor profits because the problems of the individual teacher frequently throw light upon problems common to other members of the teaching staff, and, as a consequence, they may reveal to him constructive material for offering suggestions to others. And what is of still greater importance, both parties to the conference have the opportunity

<sup>12</sup> Kyte, George C., *How to Supervise*, pp. 200-202. Used by permission of Houghton Mifflin Company.

to contribute to the realization of common goals. In this manner both individuals grow in the carrying out of a social program.

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## CHAPTER XI

### STIMULATING TEACHER GROWTH THROUGH CURRICULUM CONSTRUCTION

The problem of the construction and continuous revision of the curriculum is one of the most basic that confront those who would make the secondary school an effective instrument to be used in the progressive refinement of our social life. In a very real sense it involves the entire field of education inasmuch as curricular study cannot be divorced from a consideration of the aims and objectives of education, and the nature, needs, interests, and abilities of the learner. Since the real problem of articulation, as Dewey has pointed out, involves primarily the problem of continuous pupil growth, secondary-school curricula must also be considered in relation to the other divisions of the educational system.

No extended argument is needed to prove that social life is undergoing such significant changes that one generation can hardly predict the manner in which the next will gain its livelihood, to say nothing of the moral and social standards which will serve as guides to its conduct. The following statement is suggestive of the changes in our industrial life which have taken place within the past half century:

Since 1890 science and the machine have reconstructed our industrial life. We are spending approximately ten billions of dollars a year for automobiles, something that did not exist thirty years ago. It is estimated that the automobile industry gives employment directly or indirectly to more than 7,000,000 people.

Fifty-one years ago the world's entire telephone plant, the instrument Bell invented, could be held in a man's hand. Now there are more than 17,000,000 instruments, 350,000 employees, 25,000,-

ooo miles of wire, and a total plant investment of \$2,000,000,000 in the United States. Today the human voice can be carried over practically any terrestrial distance.

The electrical industry of today, with a book value of \$25,000,000,000 and a generating capacity of twenty million horse-power, goes back to the single plant in Pearl Street, New York, forty-seven years ago, when Edison put into regular operation his generating station and distribution system which lighted 400 lamps.

Such inventions as the automobile and the telephone have also been responsible not only for profound changes in our industrial life, but also have modified social institutions such as the community, and the family, and have affected far-reaching changes in social customs.<sup>1</sup>

With the tremendous development of the aëroplane, the radio, and television and their unpredictable influences upon social life, who can tell what particular facts, what fixed modes of response, or what patterns of conduct will be most serviceable to the next generation? It is a truism to say that the next generation must develop its own standards and solve its own problems, yet in many of our educational practices we operate as if fixed standards and practices, found to be useful in the past, would continue to provide the direction needed. In view of this situation, our educational problem, particularly upon the secondary level, is to provide such training as will most likely equip individuals to become active participants, rather than mere spectators, in directing the changes in our social life. In this reconstruction, the curriculum must play a vital part. Consequently, it must not be dominated by tradition, but must undergo progressive changes in the direction of the best social vision of the day.

While curricular problems are at the present time receiving much attention, as evidenced by the appearance within the present decade of a score of books on the subject and

<sup>1</sup> *Vitalizing the High School Curriculum*, Research Bulletin of the National Education Association, VII (September, 1929), p. 177.

the numerous reports of curricular projects completed or under way,<sup>2</sup> it may be said without fear of contradiction that the curriculum of the secondary school, in so far as content and organization are concerned, is still dominated largely by tradition.

In many schools the content of a subject is almost entirely determined by the textbook recommended by the administrative head of the school system or his immediate advisors and adopted by the board of education for a period of years. If a "course of study" exists, it is very probably little more than a time allotment of the various phases of the subject, which follows the adopted textbook. Thus, the organization of the materials of instruction, instead of facilitating changes, instead of being sensitive to the needs of the changing social order, is set up so as to be almost completely fortified *against* changes. The teacher, who holds the strategic position for making the learning process function vitally, has no other choice than to follow the adopted textbook whether or not it is adapted to the needs of the pupils. Instead of being able to exercise his intelligence in determining what shall be taught, he becomes a blind follower of someone whose knowledge and interests are very remote from the classroom situation which daily confronts him.

Many school systems have not yet evolved from the stage described so effectively by Rugg and Shumaker in writing of "Our Laggard School System."

From the days of the elementary grading of schools until the close of the nineteenth century, as the school population grew under the increasing demands for universal education, the selection of the detailed content and the arrangement of materials of our school courses were left practically altogether to the individual judgment of the textbook writer. . . . It was the college profes-

<sup>2</sup> For a comprehensive list of high-school courses of study published since 1920, see: *Vitalizing the High School Curriculum*, Research Bulletin of the National Education Association, VII (September, 1929), pp. 259-273.



sors of mathematics, of the sciences, of English, history, and the modern languages, who came forward equipped to prepare the textbooks. They did this, therefore, first for the colleges and later, with the aid of their assistants and students, for the secondary and elementary schools.

Now, being primarily interested in the logic of their generalizations, knowing little of child interests, needs, and capacities, they organized the textbooks, hence the materials of instructions, on lines prescribed by the limits of the academic research in which they were engaged. Therefore, the content of the curricula of the schools, instead of being oriented by the needs and activities of children, was determined by the research material which the professors were developing in their laboratories and libraries. The curriculum thus came to consist of a program of narrow and non-useful school subjects, *for each of which a specific textbook determined the content of instruction.*<sup>3</sup>

Clearly the necessity for the continuous adjustment of the curriculum to the changing social order, as well as to the changing conceptions of the nature of the learner, and the increased emphasis upon his interests, abilities, and needs, require that schools escape from the tyranny of the textbook and face the problem of continuous curriculum construction and revision.<sup>4</sup>

Happily such a program may be made to serve as a vital instrument for improving the conditions for teacher and pupil growth, which is the very heart of supervision. Our present task is to point out the contributions which continuous curriculum construction and revision programs may make to the attainment of the important goals of supervision.

<sup>3</sup> Rugg, H. O., and Shumaker, Ann, *The Child-Centered School*, pp.17-18 (italics not in original). Copyright 1928 by World Book Company, Publishers, Yonkers-on-Hudson, N. Y.

<sup>4</sup> This changing conception of the nature of the learner, and the educational problems which grow out of it, are treated in succeeding chapters. See particularly Chapter XII.

In order to foster professional growth on the part of the teacher, conditions should be provided which call for the continuous reorganization of his experience. He should, in other words, be encouraged to take an experimental attitude toward his task. This means that he must be free to exercise initiative in trying out new materials and activities as well as new methods of dealing with learning situations. Otherwise, he cannot hope to cope successfully with the complex problems of individual adjustment which arise in every normal classroom. If he is not free to do this, the only alternative is to attempt to impose upon the pupil by means of external incentives in the form of rewards and punishments, the uniform material which is found in the textbook, or which is demanded by the course of study. The result, of course, is mechanization and the consequent mental stagnation on the part of the teacher, and "book learning" on the part of the pupils. Suppose, however, that he is encouraged to take the experimental attitude—then his course of action, concerning the subject matter which he shall use, and the manner in which it is to be used, becomes hypothetical rather than final. It is something to try, to test, to validate, and to vary as conditions warrant. Subject matter, and consequently the entire learning situation, becomes fluid and sensitive to changes in both the learner and his environment. The teacher who assumes this responsibility can never regard the subject matter as settled, or outcomes as fixed and final. On the contrary, intellectual challenges are constantly confronting him as new problems of adjustment arise. The result is a dynamic, *thinking* teacher instead of one who follows prescriptions.

The foregoing discussion does not imply that the teacher is a free lance—it is not, to borrow from William H. Kilpatrick's<sup>5</sup> excellent discussion of growth, that he does

<sup>5</sup> *Foundations of Method*, p. 151. His statement applies to the child rather than to the teacher. The psychology, however, is equally valid.

what he "wishes," but that he "wishes what he does." The exercise of genuine leadership in supervision is, of course, necessary where such an experimental attitude is encouraged, but it is the function of this leadership to advise and guide rather than to dictate. A well-developed program of curriculum building, requiring as it does the constant exercise of intelligence on the part of the teacher, provides abundantly for one of the most essential elements of professional growth.

Again, in order to provide fully for all the factors which make for professional growth, conditions must be provided whereby the teacher identifies himself with the purposes of the school. He should not only be free to attack and solve his own specific problems, but he should also be encouraged to see his problems in relation to those of other teachers. In other words, he should see the wider implications of his work. To pull one's own weight, free from interference from others, is not sufficient. In order to fulfill the conditions of growth, one should be free to give and receive contributions. It is only in such reciprocal relationships that all-round growth takes place.

One of the chief obstacles to growth in an industrial system is the compartmentalization of the work in such a manner that one laborer is familiar with only a few of the processes required in the production of a manufactured article. As a consequence, he has no opportunity to see his work in its broader context of meaning. Our highly specialized school organization may have precisely the same effect upon its members if provision is not made for full and free interplay upon the basis of mutual interests.

As has been pointed out, the curriculum must be an outgrowth of the fundamental purposes of the school. If these purposes are narrowly conceived and arbitrarily set up, obviously there is little opportunity for the teacher to identify himself in a whole-hearted manner with these pur-

poses. However, curriculum construction and revision, if carried on in a democratic manner, must of necessity break down the barriers which exist between the work of different departments of the high school as well as between the work of individual teachers. The work of each teacher becomes the vital concern of the group, for are not all interested in the same set of outcomes?

The supervisor who fails to utilize these abundant possibilities for group interplay is neglecting one of the most significant phases of his work. Such a program cannot but give strength and vitality to his work, and the ordinary devices for supervision, such as classroom visitation and conference, and teachers' meetings, instead of tending to become ends in themselves, become means to commonly accepted ends. Supervision thus rises above the meticulous analyses of teacher traits and trait actions and centers upon positive dynamic factors which directly promote professional growth and at the same time reach the very heart of supervision — the improvement of learning conditions.

In this type of supervision, the academic discussions as to whether the supervisor should be a subject-matter expert or a technician tend to disappear. The supervisor as an educational leader is concerned with providing the necessary conditions for the curriculum-building program. In the case of the principal and his immediate staff, the contributions will of necessity be of a general nature, while the special supervisor and department heads will perform a more specialized function. Between these two interrelated functions there need be no conflict, and certainly no necessity for quantitative or qualitative appraisal of their relative values.

Curriculum-building programs are of two general types. There is, first of all, the general curriculum program in which all of the resources of the school system are brought to bear upon the problem of general curriculum construc-

tion or revision. Committees are organized, techniques developed, and the entire staff, under the guidance of the principal or a specially designated person, engage in a systematic and thoroughgoing revision of the entire curriculum. Such programs are well illustrated by the Denver and St. Louis studies. Since, as above indicated, the curriculum in the past has been determined largely by tradition, most school systems are in need of this drastic type of curriculum revision.

However, such sporadic efforts to revise the curriculum must be regarded only as the starting point for a program of *continuous* revision, in which each teacher with the guidance of the supervisor is constantly trying out new materials and methods of instruction appropriate to them, in order to meet adequately changing individual and social needs. While less spectacular, this type of program is without a doubt productive of much good.

Some schools which have engaged in a systematic program of curriculum revision retain, in part at least, the organization of committees for the purpose of carrying on this continuous program. Contemplated changes by individual teachers are referred to the appropriate committee for final action. This gives continuity to the work and facilitates coördination. The Denver curriculum-revision program, which started as a complete and systematic study of the entire curriculum, contemplates just such a continuous revision. The following statement indicates clearly the proposed plan.

From one point of view, life situations are constantly changing; from another, the methods of meeting old situations are changing, so there is no place for a static philosophy of education, unless we are to consider education as entirely separate from life. The Denver program of curriculum revision has been officially recognized as a continuous process through the establishment of a curriculum department which is to direct the program from year to year.

New courses will continually evolve and old courses will be continually revised. *There will be curriculum revision as long as there is education.*<sup>6</sup>

In the Cuyahoga County (Ohio) Curriculum Study, which was carried out under the direction of former County Superintendent A. G. Yawberg over a two-year period, the teachers were asked to decide the future policy of the county regarding curriculum revision. They voted to carry out a program of continuous revision with practically the same organization of committees which had prevailed in the more intensive study. This program is now going forward.<sup>7</sup>

Since in many schools the need for a systematic and comprehensive curriculum-building program is evident and, consequently, must afford the starting point for a continuous program, we shall present in some detail the procedures that might well be followed in organizing the high school for a program of curriculum construction or revision. These will be developed with special reference to their supervisory implications.

There are several important conditions which should be met if the program is to be successfully launched. The first of these is that the board of education, which is charged with the general responsibility of setting up educational programs, ought to be led to recognize curriculum building as a vital and necessary function of the teaching and supervisory staff, to the end that the necessary budgetary provisions may be made for it.

Boards of education are frequently constituted of men whose training conditions them to overemphasize the business or financial phase of education. Salary schedules, per capita costs of instruction, tax rates, and building programs

<sup>6</sup> *Twenty-sixth Yearbook*, National Society for the Study of Education, Part I, p. 236 (italics not in original).

<sup>7</sup> See Carter, R. L., *A Plan for Curriculum Revision in a County District*. An unpublished Doctor's Dissertation, The Ohio State University, 1929.

are, as a consequence, apt to loom much larger in their thinking than pupil or teacher growth. Unfortunately many superintendents and principals, instead of attempting to give balance to these distorted viewpoints, are perfectly willing to justify their administration in terms of increases in the size of classes and in diminished budgets. Curriculum construction is either completely neglected, or the attempt is made to carry on a program without financial support. As a result, supervisors and teachers are expected to devote much time to the curriculum program when they are already so overloaded with the regular work of the school that no time or energy remains for other activities.

That it is possible, under enlightened leadership, to enlist the aid of boards of education by direct appeals to the interests of board members and taxpayers is strikingly illustrated by the following excerpt from the recommendation of former Superintendent Jesse Newlon of Denver:

Curriculum-making is a first consideration in the successful administration of any school system. This is true because it has to do directly with instruction, and appropriations made for school support are in the last analysis for this purpose. It is, therefore, extremely wasteful and shortsighted for a community to spend large sums of money on its schools and at the same time fail to concentrate in an effective way on the problem of making appropriate courses of study. Just as one of the many considerations, attention is herein called to the fact that if 10 per cent of the teacher's time is spent on non-essential and misplaced materials in the course of study, it represents an annual waste to the Denver taxpayers of \$315,000 when calculated on the cost of the instruction item alone.

Inasmuch as all appropriations for general control, coordinate activities, auxiliary agencies, operation of school plant, maintenance of school plant, capital outlay and debt service are for the purpose of being applied to instruction, it is legitimate to say that if 10 per cent of the teacher's time is spent as above indicated, it actually represents an annual loss to the Denver taxpayers of \$478,000 on the basis of the present budget. To say that a thorough-going revi-

sion of our curricula would mean a saving of at least 10 per cent, due to elimination of non-essentials and misplaced materials and the substitution therefor of carefully selected and graded materials in the light of extensive studies that have been made, is putting it mildly. In all probability the saving would be much more than 10 per cent. This is speaking in terms of dollars and cents.<sup>8</sup>

It is noteworthy that between 1923 and 1926, the Denver Board of Education expended over \$100,000 in the carrying out of this program. The effective carrying out of a general curriculum-revision program will require that the teachers' and supervisors' programs be made with a view to providing adequately for this work. In the larger school systems, it may be necessary to employ a capable person who will devote all of his services to directing the program.<sup>9</sup> In some systems, of which Rochester<sup>10</sup> is a notable example, teachers are relieved for certain periods from part or all of their teaching duties in order to carry out an extensive program in connection with the curriculum. The following statement indicates the thoroughgoing manner in which the program is supported in the city of St. Louis:

By action of the board of education, on the recommendation of the superintendent of instruction, chairmen of all participating committees were released from their other school duties to do full-time work on the curriculum. All three members of a committee carry the responsibility for the type of work which the committee decides to undertake, but the chairman who is released from his

<sup>8</sup> *Twenty-sixth Yearbook*, Part I, p. 230.

<sup>9</sup> Among the cities maintaining specially trained officers, usually known as "curriculum directors," who are charged with the direct responsibility for giving guidance to curriculum-building programs, are the following: Kansas City, San Diego, Oakland, Los Angeles, San Francisco, Minneapolis, Long Beach, and Kenosha, Wisconsin. See Harap, Henry, "A Critique of Public School Courses of Study, 1928-1929," *Journal of Educational Research*, XXI (February, 1930), pp. 109-119.

<sup>10</sup> Simpson, Mabel E., *Organization for a Continuous School Survey*, Department of Superintendence, Official Report, Atlantic City, N. J., 1930, pp. 245-246.



other duties does the research and the writing which are involved and carries out the details of such plans and methods as may be decided upon by the full committee. The final report of the committee is also written by the chairman. On February 1, 1950 teachers were released for full-time work in this capacity. They are now housed in a certain division of the magnificent New Roosevelt High School, where a complete organization has been set up and equipped with an adequate clerical force for intensive work on the program of curriculum revision. Once each week, the committee chairman meets the rest of the committee to report progress and to determine the nature of new work to be done. Each committee chairman has an individual desk and an adequate library at his disposal.<sup>11</sup>

While it is not to be expected that small high schools will be able to secure such complete facilities, yet in most cases moderate appropriations for reference material, stenographic service, and teacher assistance through substitutes are well within the means of communities. Such provisions, together with a reasonable time allotment for supervisory activities on the part of the principal and department heads, will aid materially in furthering the program.

It is essential also that the teaching staff, with the guidance of administrators and supervisors, be led to accept curriculum building as a professional responsibility and as a major opportunity to affect vitally the educative process. This requires a totally different professional outlook on the part of both supervisors and teachers from that which tradition has dictated. The supervisory staff, on the one hand, instead of being charged with the responsibility for selecting textbooks and for improving courses of study, is expected to afford dynamic leadership in a thoroughly democratic program, in which there is constant opportunity for the full and free sharing of interests and a recognition of the unique contributions of each and every member of

<sup>11</sup> *Twenty-sixth Yearbook*, Part I, pp. 245-246.

the teaching staff. On the other hand, the teacher, whose activities have been confined too closely within the four walls of the classroom, should assume a large measure of responsibility for determining the essential conditions for his work. He must see his own contribution in its relationship to the attainment of the aims and purposes of the entire system. With this changed attitude, curriculum building, with its vital function as an instrument in educational progress, is seen as a major responsibility.

There are two rather serious limitations upon the development of a professional attitude toward curriculum-building programs. The first is the lack of a true professional spirit. In too many cases, teachers regard teaching merely as a job to be performed until something more desirable "turns up." This is evidenced by the alarming turnover among teaching groups and the relatively short period of teaching service rendered by the individual. Another contributing factor is the depreciation of professional training due, on the one hand, to the traditional academic prejudice against technical or practical training and, on the other, to the superficial character of many of our so-called professional courses, which have been sharply divorced from the academic. The professional treatment of subject matter as a means of avoiding the dualism between culture and vocation has not yet found its way into the thinking of large numbers of academic or even professional groups. Until our professional programs are more vitalized, the task of the educational leader is bound to be difficult.

The second limitation upon the securing of a professional attitude toward curriculum revision is the lack of vision on the part of administrators and supervisors regarding the conditions essential to professional growth. Many of those directly charged with the responsibility for educating youth for democratic social life have failed to see the function of the teacher in the process. They are ready to grant

a democratic relationship between pupil and teacher, to the end that the pupil group comes to accept responsibility for its own control, and to set up conditions necessary for socializing activities, but they retain the traditional view that it is the sole business of the administrative or supervisory staff to develop courses of study and recommend textbooks.

We cannot wait until these two limitations are removed before embarking upon our constructive curriculum-building program. We might even venture to suggest that the very program proposed affords the most certain means for the correction of wrong attitudes and for securing deeper and richer concepts of the full implications of democracy. The administrator cannot wait with folded arms for the teacher-training institutions to develop teachers with social vision. Nor should the teachers be satisfied to await the dawn of a new day when the administrator will be trained in social leadership. One of the elements of John Dewey's social philosophy which makes it so vital is the fact that it emphasizes the need for the progressive *refinement* of our democratic social ideal, based upon existing conditions. We secure our concept of the ideal, not from perfect forms, but by means of a continuous process of reconstruction of individual experience. Thus, it becomes a challenge to those who occupy positions of leadership to provide conditions designed to render relationships *more* social. The implication of this doctrine for our present discussion is that we may use the present status, unsatisfactory as it may be, as the starting point for an enriched conception of democracy applied to our educational institutions.

Before undertaking a curriculum-building program, then, the supervisor should plan ways and means of enlisting the entire teaching staff in the undertaking. This can best be done by preliminary studies of needs, both from the standpoint of the pupil and the community, to the end that the

teaching groups sense the need for a thorough study of the curriculum. In such preliminary studies, as well as in the plans for the curriculum study, the classroom teacher should play a major part. The plan of having the administrative and supervisory group make all plans and then "sell" them to the teachers is an example of the manner of "coöperation" often attempted. It frequently fails because teachers, who are closest to the learning process, regard it as an externally imposed scheme, rather than one which grows out of a common need.<sup>12</sup> When a program grows out of a combined planning of superintendents, principals, boards of education, teachers, and the community in response to recognized needs, there will be little need for "selling campaigns."

Having enlisted the aid of the entire staff, the board of education, and the community in the carrying out of the curriculum program,<sup>13</sup> the next step is to consider the problem of the aims and objectives of secondary education. B. H. Bode, in a recent article, points out the need of a program in the general field of education. He states:

. . . American education is a confusing and not altogether edifying spectacle. It is productive of endless fads and panaceas; it is pretentiously scientific and at the same time pathetically conventional; it is scornful of the past, yet painfully inarticulate when it

<sup>12</sup> For an interesting example of a "selling campaign" *after* the plans and policies have been formulated, see: Hopkins, L. T., *Curriculum Principles and Practices*, pp. 354-358.

<sup>13</sup> The actual organization of the school system for curriculum construction will vary with the size and organization of the school, the extensiveness of the program, the financial provisions which have been made by the board of education, and the qualifications of the various staff members. The minimum organization would probably consist of the following committees: (1) a general clearing committee, in charge of the principal or some specially qualified person appointed by him to act as curriculum director, and (2) separate committees in each subject-matter field covered by the study. The problem of organization will be discussed more fully in Chapter XX.

speaks of the future. The tremendous activity now going on in education is evidence of far-reaching social changes, but we do not seem to know what these changes signify or how they are to be directed.<sup>14</sup>

He concludes that "the chief defect of American education today is the lack of a program, or sense of direction. It has no mission or social goal."

This statement is especially true in the field of secondary education. The unparalleled increase in the secondary school population has brought about a need for a careful reëxamination of the purposes which are to be served by it.<sup>15</sup> As George S. Counts writes: "However perfectly the conventional curriculum may have been adjusted to the realization of the aim of the narrowly selective secondary education of the nineteenth and preceding centuries, it is hardly suited to the needs of the vastly increased high-school population of today."<sup>16</sup> As has been suggested in another connection, the conflicts in the fundamental purposes of the secondary school arose when social changes demanded a new type of education which prepared for life as well as for college. In other words, it was the recurrence of the old conflict between the cultural and the practical. The clear conception of purposes disappears when the need arises for serving the wider social group. The history of secondary education reveals the resulting chaos and the repeated attempts to redefine the purposes of the institution. This is still one of the unsolved problems of the secondary school.

The curriculum-making group cannot ignore this funda-

<sup>14</sup> "Apprenticeship or Freedom," the *New Republic*, LVIII (June 4, 1930), pp. 61-64.

<sup>15</sup> In this connection, see the following article: Bruce, William F., "Whither Secondary Education?" *Educational Administration and Supervision*, XV (September, 1929), pp. 431-440.

<sup>16</sup> *Twenty-sixth Yearbook*, Part I, p. 135.

mental problem, for unless an adequate formulation of purposes and goals is wrought out of the varied contributions of the group and made to function vitally in the selection and organization of the materials of instruction, the result of the revision program will be a series of unrelated bodies of material having no common integrating center.<sup>17</sup>

That there is no adequate recognition of this necessity for a unified conception of purposes is evident. Henry Harap made a study of the content of two hundred forty-two courses of study which had been deposited in the Bureau of Curriculum Research at Columbia University. This represented an excellent sampling of the output of public-school courses for the years 1928 and 1929. The author found that 27.9 per cent of these courses made no mention at all of either general or specific objectives; 46.3 per cent listed specific objectives, while only 25.4 per cent made use of general objectives. He states that even this meager recognition of objectives "represents the advance that has been made in the last ten years. Five years ago they were fairly common, and ten years ago they did not appear at all."<sup>18</sup>

This lack of agreement of the place of general objectives in the curriculum program is well illustrated in the contrasting points of view which prevailed in two major curriculum-revision programs, Denver and St. Louis. In the former, the objectives grew out of the study of the various committees. The procedure and its justification are clearly explained in the following statement:

There are two ways of going about a curriculum-revision program. One is to begin by setting up the objectives to be attained in the

<sup>17</sup> For an excellent discussion of the function of aims in curriculum construction, see: Hopkins, L. T., *op. cit.*, Chs. II, III.

<sup>18</sup> "A Critique of Public School Courses of Study, 1928-1929," *Journal of Educational Research*, XXI (February, 1930), pp. 109-119.

various grades and subjects, and by laying down a set of guiding principles to govern in the selection and organization of subject matter. To our way of thinking, such procedure is unsound. It is to a large extent reversing the procedure that ought to obtain in curriculum construction, because it limits the activities and responsibilities of committees. The character of a course of study is to a large extent arbitrarily determined before the committee actually begins its work. This means the stifling of initiative.

In Denver we have followed the opposite procedure. We steadfastly refused to lay down a set of principles to guide committees in their work or to express our opinions as to what were the particular objectives to be attained in particular courses. On the other hand we took the position that every committee should begin by making a survey of the writings, the experimentation, the practices, the controversies, and the unsolved problems of its field. Necessarily, before a committee can make an intelligent attempt at the actual construction of a course, the members must also become students of the principles and the philosophy of education. We have endeavored to create a condition in which it was necessary for every committee to make its own decision as to guiding principles and objectives.

We believe that under this procedure a set of guiding principles and objectives will emerge, subject of course to constant modification, that will be better than any that can be imposed or agreed upon at the beginning of a program; and that it is better designed to stimulate study, investigation, and participation on the part of teachers, whereas any other procedure tends to prevent it.<sup>19</sup>

In St. Louis the procedure was reversed, as indicated by the following excerpts from the report prepared by Walter D. Cocking:

The first step was definitely undertaken in September, 1925. It was considered that the *determination of aims and the setting up of a program of studies and time allotment was the particular job of the administrators of the school system* — namely, the principals. A committee was therefore appointed consisting of four principals

<sup>19</sup> *The Twenty-sixth Yearbook, Part I, pp. 234-235.*

and the general director of the curriculum program. Each principal on the committee represented one of four divisions of the school system, kindergarten-primary, elementary, intermediate, and high school. The task assigned to the committee, which was known as the "Committee on the General Aim of Public Education" was the restatement of the general aims of public education in the city of St. Louis.<sup>20</sup>

After a tentative statement had been prepared by this committee, eight additional principals, two from each division of the school system, were called into conference. These divisional committees were asked to review the work of the general committee and to formulate the specific aims of their respective divisions. These divisional aims were then reviewed by a committee of fifty principals, after which they were presented to all of the administrators, supervisors, and teachers of the school system, as well as to the patrons of the school. "Thus, before the committee's report on general and divisional aims was finally submitted to the superintendent of schools, it had received the careful criticism of a large number of people whose positions and interests qualified them to express intelligent opinions in regard to the desirable objectives of public education."<sup>21</sup>

The procedure in the Cuyahoga County study,<sup>22</sup> to which reference has been made previously, differed from those cited above in important particulars. Here, each teacher group at the outset studied the problem of objectives. Each individual prepared his own list of objectives. Group meetings were held at which these individual lists were combined with or without formal tabulations. The resulting list was then forwarded to the curriculum director, who

<sup>20</sup> *The Twenty-sixth Yearbook*, Part I, pp. 241-242 (italics not in original).

<sup>21</sup> *Ibid.*, p. 244.

<sup>22</sup> Carter, R. L., *op. cit.*, p. 159.



submitted the lists from the entire county to the general committee. These were then combined, and classified, and returned to the groups for further discussion and revision. This policy of enlisting the aid of practically every individual who is to engage in the curriculum study in formulating aims and objectives is defended by R. L. Carter, director of the study, on the grounds that, "in the process of thinking through and discussing the purposes of education," individual points of view would be established.<sup>23</sup> This is rightly held to be a very significant phase of the program.

The above discussion suggests two crucial problems. First of all, the curriculum-making group must decide the place of general objectives in the program, and, second, it must come to some conclusion as to the function of the teacher in the formulation of these objectives.

If aims are to function in giving point and direction to the program, they must be formulated early in the program. This does not mean that they are to be fixed and final. On the contrary, they should remain flexible and tentative throughout the study. Undoubtedly they will be revised many times before the study is completed. It is conceivable, of course, that a general agreement cannot be reached upon the problem. This, however, is less important than are the values which are bound to be derived from the discussion of these differences and in the attempt to develop common viewpoints as to the broad, basic goals which are to be striven for in the educative process. Unless it is possible to secure such common viewpoints, it is difficult to see how we can expect to secure the maximum results in learning. Certainly if the curriculum is seen as the instrument of society in promoting social progress, it should be developed with an adequate sense of direction. This can only be secured by facing, at the outset of the study, the

<sup>23</sup> See *ibid.*, p. 163.

intricate problem of the ends and purposes of secondary education.

Again, if the democratic conception of supervision, which requires the maximum sharing of interests and full and free interplay among the various groups is to be followed, it requires that the teacher function vitally in the formulation of aims. He must, of course, bear a heavy responsibility in the selection and organization of activities in the various subjects. He cannot meet this responsibility effectively unless the aims of the school function as dynamic concepts, rather than as external statements formulated by others. The writers have little sympathy with the point of view that the teachers are not likely to meet the qualifications for membership on a committee on aims.<sup>24</sup> If stimulation of professional growth is one of the major objectives of supervision through curriculum construction, "paper" qualifications become vastly less important than the whole-hearted enlistment of the entire staff in the vital problems involved.

It is not expected, of course, that the curriculum-making group of every school will start *ab initio* and formulate an entirely new set of objectives for secondary education. However, it is entirely feasible for the group, possibly through a special committee representative of the various interests, to make a careful study of some of the most significant contributions in this field, and, in the light of this investigation, set up, tentatively, for the consideration of the entire group a formulation which meets the needs of the school. This statement may then be refined and revised as a result of further study and experimentation in the use of the objectives as criteria for the selection of subject matter. This study should include, in order to give historical continuity, a brief history of the secondary-school curriculum with special emphasis upon the Reorganization Movement

<sup>24</sup> See: L. T. Hopkins, *op. cit.*, pp. 358-359.

culminating in the *Report of the Committee on Reorganization*<sup>25</sup> which formulated the well-known seven objectives of secondary education: (1) Health. (2) Command of Fundamental Processes. (3) Worthy Home Membership. (4) Vocation. (5) Citizenship. (6) Worthy Use of Leisure. (7) Ethical Character. While this formulation has no doubt been very influential, yet it fails to present an integrated point of view which might serve as the basis for determining content and procedure in all fields. The various "objectives" are little more than convenient classifications of human activities. Consequently, they fail to give direction to the program.

This study should also include the more recent report of the North-Central Committee on Standards,<sup>26</sup> which proposes four "ultimate objectives" each with appropriate immediate objectives, as follows: "(1) To secure and maintain a condition of personal good health and physical fitness. (2) To use leisure time in the right ways. (3) To sustain successfully certain definite social relationships, such as civic, domestic, community, and the like. (4) To engage successfully in exploratory-vocational and vocational activities."

A recent formulation of objectives which curriculum-making groups may profitably examine has been developed by William Martin Proctor.<sup>27</sup> He proposes a "restatement"

<sup>25</sup> *The Cardinal Principles of Secondary Education*, United States Bureau of Education Bulletin, No. 35, 1918. See also: Sanguinet, E. H., "Trends in Secondary Education as shown by Reports of Some Major Committees," *Educational Administration and Supervision*, XIV (November, 1928), pp. 559-732.

<sup>26</sup> "Report of the Committee on Standards for Use in the Reorganization of Secondary School Curricula," the *North-Central Association Quarterly*, I (March, 1927), pp. 1-16.

<sup>27</sup> "A Restatement of the Aims of Secondary Education in Terms of Adjustment," *Junior-Senior High School Clearing House*, IV (October, 1929), pp. 85-91. The reader is referred to this article for an elaboration of this point of view.

of aims in terms of adjustment, which he sees as a very significant aspect of education. The following are the adjustments which education should aid the individual to make: (1) Physical Adjustment. (2) Mental Adjustment. (3) Social Adjustment. (4) Economic Adjustment. (5) Æsthetic Adjustment. (6) Ethical and Spiritual Adjustment.<sup>28</sup>

The need for an integrating conception that will unify the various aims which have been proposed has been discussed previously. An examination of existing formulations of the aims of secondary education serves only to emphasize this need. The unmistakable trend toward social democracy suggests that the integrating conception which might well serve as the basis for the redefinition of the purposes of secondary education is that which is expressed by B. H. Bode as the development, on the part of every individual, of a "social outlook on life," based upon the "principle of a free intelligence." This view implies that the distinctive functions of the school should be to develop in the pupil the disposition to solve the conflicting problems of his environment by means of reflective thinking. The effect of the adoption of this conception is thus explained by Dr. Bode:

The implications of this principle for social and economic theory, for morality and religion, are far more extensive than one might antecedently suspect. It seems fairly obvious that the change which is going on in our "total attitude" or outlook on life is as far-reaching as the change in our conception of vocational efficiency. The influence of authority and tradition for the regulation of conduct is unmistakably on the wane. Walter Lippmann in his *Preface to Morals* makes the claim that skepticism is more widespread at present than at any previous time in history. Our difficulty is that we do not know how to chart a new course. Perhaps the chief source of this difficulty lies in the fact that we delude our-

<sup>28</sup> For an excellent discussion of the various formulations, see: Davis, C. O., *Our Evolving High School Curriculum*, Chs. V, VI.

selves into thinking that the break with the past is more complete than it really is. Some of our most radical educational reformers are at bottom as conventional as the buttons on the sleeves of a man's coat. Old habits and prejudices are retained on the rather naïve assumption that they are expressions of cosmic law. If we are going to be really in earnest about educational reform, we must make it center on the question of the place that intelligence should occupy in human affairs. If we believe that intelligence can be trusted and should be cultivated, we are at once committed to a principle of educational procedure. Education at every level becomes a reorganization of personal experience, and it also becomes a progressive reinterpretation of beliefs in the direction of an independent philosophy of life.<sup>20</sup>

This program calls for a new synthesis which does not break completely with the past but which, on the contrary, conserves its significant contributions. The cultivation of intellectual and æsthetic interests, based upon standards of judgment, rather than upon mere "feeling," becomes part and parcel of this development of social outlook, as does the exploration and development of practical interests. At the same time this conception guarantees that individual growth is conserved and fostered. The individual "finds" himself in the building of a social philosophy of life. He does not cultivate individuality by an escape from his fellow men, but through contacts with them. In this way, the traditional dualism between culture and vocation becomes the basis for a new integration.

If the school recognizes as its distinctive function the cultivation of this new attitude of the individual toward the problem of present-day social life, the resulting curriculum will be made rich in those elements which make for a full understanding and appreciation of the contributions which

<sup>20</sup> Bode, B. H., *op. cit.*, p. 62. In this connection see also a recent editorial, "The Problem of Liberal Education," *Educational Administration and Supervision*, XVI (November, 1930), pp. 333-336.

the various fields of human activity have made and are capable of making to human welfare. Educational method will also become transformed because the major emphasis is placed upon the development of reflective thinking, rather than upon the passive absorption of information or the acquisition of specific habits and skills.

Out of a study of the various statements of objectives which have been set up, and a consideration of the basic philosophy which should give point and direction to the educative process, should evolve a formulation of the major objectives of secondary education upon which the curriculum-making group could agree tentatively, at least, as the basis for launching the program. These should serve to integrate the diverse points of view and also the various subjects of study. These objectives must, of course, be applied to specific fields and subjects in order to make them function in the actual selection of subject matter. Frequently general objectives serve only as a point of departure and, after being carefully formulated, are discarded and consequently serve no useful purpose, except possibly to adorn the first page of the final product.

Having determined the general objectives of secondary education which are to function in the construction of the curriculum in the various fields, the next step is to organize the teaching staff into subject committees. These committees should be sufficiently broad in scope to include the entire range of possible offerings within the field. Thus, the English Committee should consider the entire field both as to content and grade placement. The committee may of course be subdivided for intensive work, but the proper integration and continuity cannot be secured unless all curricular material is finally reviewed and organized by the entire group.

It is impossible within the space allotment of this chapter to consider fully the functions of these committees or

the particular procedures which they should follow. These will vary with the extensiveness of the study and the time which is available, as well as with local conditions. We shall, however, present in outline form some of the essential steps which a subject committee should take in the development of the curriculum.

- I. A consideration of the aims of the subject or field in the light of the general objectives of secondary education.
- II. A survey of the historical background and present trend of the subject or field.
- III. A study and analysis of the available subject matter and activities in the field. This study would necessarily deal with the following sources:
  - (a) Leading texts and reference books.
  - (b) Courses of study.
  - (c) Reports of National Committees.
  - (d) Expert opinion as revealed in the professional literature and through direct contact with curriculum specialists.
  - (e) Scientific studies.
  - (f) Present content of the curriculum.
  - (g) Community resources.
- IV. An evaluation of the available curriculum material in terms of the following:
  - (a) The objective of secondary education and the aims of the subject or field.
  - (b) The needs of the community as determined by an adequate survey.
  - (c) The abilities, interests, and present and probable future needs of the pupils.
  - (d) Experimental studies carried on by the teaching and supervisory staff.

- V. The organization of the materials of instruction in terms of grade placement.
- VI. The development of instructional units in terms of the teaching procedures which are to be followed.

A number of these instructional units should be tried out in the various fields under the direction of department heads or other supervisors and appropriate changes made in the light of the weaknesses which are revealed.

When the subject committees have completed their work and appropriate tryouts and revisions have been made, the resulting courses of study should be reviewed by the general committee which is responsible for proper integration in the various fields.

The final step in the program is the installation and appraisal of the new courses of study. This may be quite informal in the case of the small school where the teachers who have had charge of the construction of the various courses are also the ones to put them into actual operation. In large schools, where the size of the staff has made division of labor necessary, a definite program which provides for group discussions upon the new materials and methods should be arranged.<sup>80</sup> Needless to say, the new courses of study should be submitted to careful appraisal<sup>81</sup> by procedures which are considered most effective in determining the learning products that are implied in the aims and objectives which have been set up. This appraisal, of course, must be a continuous process and continuous revision must be made in the light of the results of such appraisals. The responsibility for this work should be shared jointly by teachers and supervisors.

<sup>80</sup> For a detailed discussion of all the intricacies involved in the installation of new courses of study, see: Hopkins, L. T., *op. cit.*, Ch. XII.

<sup>81</sup> Denver's appraisal program is reported briefly in: *Eighth Yearbook*, Department of Superintendence, pp. 185-186.



A program such as has been described results not only in developing a sensitivity, on the part of teachers and supervisors, to the need for continuous experimental study of curricular problems, but it also serves as an effective means for stimulating the professional growth of the teacher which, in the last analysis, is the most effective way of improving learning and teaching.

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## Part III

# THE SUPERVISOR AND PUPIL RELATIONSHIPS



## CHAPTER XII

### CONCEPTIONS OF EDUCATION AND THE EDUCATIVE PROCESS

If the supervisor is not a teacher as well as a supervisor, his relations with pupils are largely indirect and the influence he exercises upon them is primarily through the medium of others. As we have seen,<sup>1</sup> this influence follows from the way in which he organizes his supervisory program, from the professional interest he stimulates teachers to take in problems of teaching, and from the attitude of intelligent understanding and appreciative insight into the nature of children which he helps to foster in his colleagues.

Schooling is a far more complicated undertaking today than it was a generation ago. At that time few secondary schools aspired to realize more than John Locke's ideal of a sound mind in a sound body. The mind was thought of as an entity, relatively independent of the body, which could be educated without reference to the emotions. With the increasing complexity of our social and political life, and the influx of representatives from all elements of our population into the secondary school, there has come a steady demand that the school concentrate rather directly upon education for citizenship and character building.

At first results were sought through supplying information in the form of new courses taught in old ways. Subjects such as community civics, civic biology, and the social studies, designed to replace conventional history, civics, geography, and economics, received wide adoption and here and there courses in direct moral instruction were intro-

<sup>1</sup> Cf. Chapter V.

duced. Gradually, however, the influence of a psychology which recognized the unity of the individual and the mutual interrelationship of the physical, the mental, and the emotional nature of the child led educators to see that the school must assume the responsibility for educating the whole child. With this shift in emphasis has come a keener insight into the complex character of individual development. The recreational life and interests (social and intellectual as well as physical) have become integral parts of the school program. Visiting teachers and child-guidance clinics have gathered tangible evidence of the bearing of home and community conditions upon academic progress. Educators such as Morrison, Reavis, and others, in dealing with behavior and learning problems in school, have discovered that learning difficulties give rise to behavior problems in school and home just as home conditions generate school problems.

This assumption of new educational responsibility on the part of the school is rendered difficult by the tendency of teachers and supervisors to view boys and girls through the colored lenses of their own preconceptions of human nature. Nor are these preconceptions altogether consistent. They are frequently survivals and composites of conceptions of child nature which have, from time to time, dominated educational practice.

A brief survey of certain representative views of original nature and the learning process will perhaps make clearer these statements.

Take first the conception of children that prevailed in colonial days. According to this view the child possesses in miniature the powers and faculties of adulthood. The purpose of education is therefore simple. It consists in disciplining and training these powers, stimulating their growth, through exercise upon materials that adults value; while the test of the appropriateness of learning materials is found

either in their actual employment in adult life or their training value for this later use.

Curricular materials and methods of teaching and discipline employed in both grammar schools and academies reflect these adult concerns. An appeal to the immediate interests of the pupil was conceived to be irrelevant, if it were not actually frowned upon. Genuine educational values, it was thought, followed from working for the sake of discipline. This aim is well expressed by Alexander Hill in his justification for the teaching of the classics. He writes:

Some part of the credit for this most desirable result must be attributed to the discipline of working at a subject which offers in itself no temptations to work. No advantages from the schoolboy point of view are near enough to his own life to arouse his curiosity. His only motive for learning his lesson is that his master tells him to do so; and this, we think, should always be sufficient.<sup>2</sup>

What this conception of education implies as regards discipline may be inferred from the influence of Dr. Benjamin Abbot, principal at Phillips Exeter from 1790 until 1838, upon Lewis Cass. The father hesitated for a time to send Lewis to Exeter because he was wild and hard to manage, but Dr. Abbot wrote, "Send him to me, and I'll see what I can do with him." Some months later a grateful letter to Dr. Abbot stated, "If Lewis was half as afraid of the Almighty as he is of you, I should never have any more trouble with him."<sup>3</sup>

Secondary-school curricula and teaching methods have only tardily shaken off the influence of this tradition. What began, however, as an identification of school concerns with preparation for adult life came gradually to center exclusively upon preparation for college. And since textbooks

<sup>2</sup> Quoted by John Adams in *Modern Developments in Educational Practice*. London: University of London Press, 1922, p. 209. (Published in the United States by Harcourt, Brace and Company, New York.)

<sup>3</sup> Brown, E. E., *The Making of Our Middle Schools*, pp. 259-260.

have been written chiefly by college teachers, their content has reflected the research interests of the authors rather than ministered to the growing needs of adolescents.<sup>4</sup>

It is only within the past few years that attempts have been made to reconcile preparation for adult living with the organization of materials and methods in terms of pupil interests and characteristics. Slowly, however, orientation courses are replacing the conventional specialized subjects, and practical courses, such as the household and industrial arts, are concentrating upon present life objectives as the best method of laying a sound basis for future responsibilities.<sup>5</sup>

This transfer of attention from preparation for adult life to the characteristics and needs of adolescent boys and girls was brought about in this country in large measure through the influence of G. Stanley Hall and his associates, who fathered the recapitulation and culture-epochs theories of child development. According to these theories the human individual passes through clearly marked stages of growth similar in character to significant epochs in racial history. A typical and a recent statement of this point of view is found in Adolphe Ferrière's book, *The Activity School*. In discussing the psychological foundations of the activity school, Ferrière identifies the movements of racial history with the manifestations of the *élan vital* or life force. He considers that there exists a "parallelism between individual life and the evolution of the human race." He writes in this connection:

<sup>4</sup> For an amplification of this point cf. Rugg and Shumaker, *The Child-Centered School*, pp. 17-18.

<sup>5</sup> See, for example, the orientation courses that are being worked out at Stephens College; also Course of Study Monographs, Number Twelve, *Home Economics*, Junior High School, Public Schools, Denver, Colorado; and Dyer, Annie Robertson, "Educational Analysis of Home and Family Life for Curriculum Purposes," Office of Research in Home Economics Education, Teachers College, Columbia University, 1926.



The embryo in nine months passes through the phases of an animal evolution which doubtless lasted millions of years; during his first years, and up to 16, he goes through the stages of the primitive hunter and herdsman, stages which probably lasted hundreds of centuries; from 6 to 12 years he goes through the farming and artisan stage, which lasted some thousands of years and continues — as is also the case with the first stage — down to the present, wherever the conditions do not permit the development of the stage of mental and social evolution which normally follows. Ancient Greece was at this stage; the Roman Empire marks its decadence. Some twelve centuries sufficed for the Middle Ages, which correspond in the child to the years from 12 to 16. As the adolescent approaches the age of his parents when he was conceived, the amount of past time corresponding to one year of his life is decreased.<sup>6</sup>

Those who accept this "biogenetic law" would use it both as a criterion for selecting the subject matter of education and as a basis for understanding and guiding the actions of the individual child. Hall, for example, writes regarding adolescent traits and curricular materials appropriate to this age:

Youth loves combat, and this may be developed into debate; it loves distinction and to exert influence, and this suggests oratory; it loves to assume rôles and to widen sympathy by representing at this circumnutating stage, with its keen sense of character, manifold types of human life; and it has a passion for the theatre, and this suggests the drama, which always has this supreme moral quality that the good is victorious. Its very best safeguard and its highest ideal is honor, and this has its best expression in what may be called the ethnic Bible of the Saxon race in its adolescent stage, the literature of chivalry. Its religious instincts are at their very best, and to this our Scriptures make the noblest appeal.<sup>7</sup>

<sup>6</sup> P. 79. Translated by F. Dean Moore and F. C. Wooton, The John Day Company, New York, 1928.

<sup>7</sup> Hall, G. Stanley, *Adolescence*, Vol. II, pp. 432-433. D. Appleton and Company.

Like most generalizations, however, the culture-epochs theory is vague, if not actually contradictory, in its precepts for guiding the actions of individual children. Its pronouncements vary inversely in clearness with attention to the individual differences between children and a detailed acquaintance with the patterns of racial behavior. In other words, the more closely we observe the details of a child's behavior, the less clearly does he seem to conform to historical patterns, and the more intimately we inform ourselves regarding the developments of peoples, the less uniform and universal become the stages of their evolution.

Nor are the recapitulation and culture-epochs theories altogether consistent as regards the practice elders are to adopt even when children are clearly identified as to their stage of development. Take, for example, the period of pre-adolescence. This period of growth in the individual corresponds roughly with the ages of nine and ten to twelve or thirteen. According to Hall it parallels that period of human development well above the Simian and before the historic period, "when our early forbears were well adjusted to their development." To the educator, therefore, it suggests "drill, habituation, and mechanism"<sup>8</sup> in teaching method, rather than emphasis upon reasoning, creative thinking, or the stimulation of judgment and originality. In his book, *Adolescence and High-School Problems*, Pringle can thus write regarding methods teachers should adopt in dealing with children of this age:

As to method, the statement sounds unpedagogical: much of the instruction must be dogmatic and authoritative and often to get the best results, the methods must be mechanical. So far as many of the fundamentals are concerned, it is a case of drill and inculcation rather than true teaching. Duty on the part of the pupil

<sup>8</sup> Hall, G. Stanley. From an address delivered before the National Education Association. Cf. *Proceedings and Addresses*, National Education Association, 1901, pp. 474-488.

consists largely in habitual and prompt obedience; for in giving lodgment to the fundamentals of knowledge, it is not practical to coquet with the child's likes and dislikes.<sup>9</sup>

On the other hand, in the same chapter of this book, Pringle advocates a comfortable policy of hands-off regarding the behavior of pre-adolescent children. After describing the racial prototypes of individual growth he remarks:

Thus we have a simple answer to the questions concerning boyhood, which have so long troubled fond parents and teachers; the boy has inherited the instincts, the feelings, and the experiences of primitive man and is rapidly repeating in his way the stages of progress through which his uncultured and barbaric ancestors have passed. Why should he not revel in the comradeship and rough-house activities of the gang, whose racial prototype was the council of the braves? . . . Why should we not expect him to fight and settle some of his grievances as did his barbaric ancestors? If this is natural and hence necessary to the nature and development of the pre-adolescent, are we going to lose our patience or become discouraged with the boy who shows these traits, which from our viewpoint are sometimes so disturbing?<sup>10</sup>

A different and perhaps equally plausible explanation for the behavior of boys at this stage might be found to lie within their environment. And yet, may it not be that a pre-adolescent boy who is confined within a formal school where he must study the conventionally organized subjects of geography, history, and arithmetic, according to methods "dogmatic and authoritative" that involve "drill and inculcation rather than true teaching" will feel driven to celebrate his release from school through "rough-house activities of the gang"? May not these so-called racial urges be no more than releases of energy, compensatory drives that owe their origin to conditions in the present?

<sup>9</sup> *Adolescence and High School Problems*, p. 19. Reprinted by special permission of D. C. Heath & Company.

<sup>10</sup> *Ibid.*, p. 17.

The difficulties and confusions implicit within the culture-epochs theory have stimulated critical observation of child behavior with the result that the recapitulation and culture-epochs theories are today in full retreat leaving, however, manifest evidences of their former dominance in school organization, subject-matter arrangements, methods of teaching, and in discipline.<sup>11</sup> Instincts and hereditary tendencies today are undergoing progressive liquidation.

E. L. Thorndike, in the field of educational psychology, was one of the first to insist that vague generalizations give way to controlled observation and that instincts be described in terms of specific stimulating situations and specific responses to these situations. Under his influence descriptions of the educational process have come to be stated in terms of S→R bonds. He, himself, evidently believes that learning is entirely a matter of manipulating situations (S), to which we are originally sensitive, and response units (R), with which we are originally endowed.<sup>12</sup> Conceived and stated in this way, education implies little more than habit formations. Instincts are preformed bonds of a theoretically determinable character and learning is little more than putting together in new patterns what was previously given in simple elements. Thus, we find Thorndike clearly expressing the limitations of original nature as follows:

The original basis of the wants which so truly do and should rule the world is the original satisfyingness of some states of affairs and annoyingness of others. Out of such original satisfiers and annoyers

<sup>11</sup> The junior-high-school organization as a separate unit including the seventh, eighth, and ninth grades is due in large measure to the dominance of Hall's view that the period of early adolescence is sufficiently unique to call for a distinct type of school unit. The 6-4-4 plan will, of course, question this assumption.

<sup>12</sup> Cf. pp. 5-8 and Chapters X-XII inclusive of *Educational Psychology* (Briefer Course), Teachers College, Columbia University, 1917.

grow all desires and aversions; and in such are found the first guides of learning.<sup>13</sup>

And in his chapters describing both animal learning and the higher forms of learning in man, Thorndike indicates that learning is a matter of relating situation elements and response units already given.<sup>14</sup> The chick in reducing the time necessary to find its way out of a maze strengthens and weakens bonds between "a situation present to sense and responses in the nervous system which issue then and there in movement," and the child who acquires an abstract idea such as "fiveness" merely disengages a response unit from gross total responses and attaches the response unit to the appropriate situation element.<sup>15</sup>

This conception of education simplifies the educative process. It mechanizes education and theoretically, at least, subjects learning to the control and the direction of the pedagogue.

Nor have pedagogues been slow in following up this point of view. Biology for a time seemed to furnish corroborative evidence in the form of the Mendelian theory of heredity, according to which the germ plasm contains elements or "determiners" which later develop into bodily organs and functions. What the biologist thus termed "determiners" the psychologist describes as "preformed bonds" between situations to which the individual is originally sensitive and responses with which he is originally endowed.<sup>16</sup> This opened up the attractive prospect of de-

<sup>13</sup> *Ibid.*, p. 50.

<sup>14</sup> *Ibid.*, Chapters X-XII.

<sup>15</sup> We are unable here to enter into a detailed explanation of Thorndike's description of learning. We can only refer the reader to Chapters X-XII inclusive of Thorndike's *Educational Psychology* (Briefer Course) and to the following references for a critical discussion of his conceptions of learning: Bode, B. H., *Conflicting Psychologies of Learning*, Chs. XI-XIII; Thayer, V. T., *The Passing of the Recitation*, Chs. VI-VIII.

<sup>16</sup> Cf. Thorndike, E. L., *op. cit.*, p. 2, and Gates, *Psychology for Students of Education*, p. III.

vising tests which should reveal to educators the degree of "raw brain power" children possessed. An impetus was given to the construction of intelligence tests and methods of classifying pupils in school on the basis of test results. Moreover, intelligence tests seemed to indicate what remedial measures might or might not be adopted with profit in dealing with problem pupils. Actions which Hall would have termed atavistic evidences of primitive or prehistoric urges working through the child tended now to receive explanation in terms of environmental factors working in conjunction with the child's "native" endowment of intelligence.

The S→R bond explanation of learning had further consequences. It implied that the mind consists of specific abilities which exist and develop relatively independently of each other. This suggests that school materials should be analyzed into specific learning situations, graded according to age and intelligence level, and taught so that children might economically and efficiently attach appropriate responses to the situations presented.

This has stimulated the organization of courses of study in terms of specific objectives. That is, attempts are made to express the content of subjects of study in the secondary school in terms of certain desired outcomes in the way of specific knowledge, attitudes, habits, and skills, together with the precise activities pupils must perform in order to acquire these abilities. An idea of what this implies when carried out literally in curriculum construction is found in Franklin Bobbitt's *How To Make a Curriculum*. He states:

In the case of most objectives, there is a long road to be traveled from infancy to maturity. The pupil activities will differ according to the ages of the pupils. The first step is to formulate a composite list which enumerates all kinds of desirable experiences involved in the entire journey. This done, the next step is to decide which of these are appropriate to the early grades, and in what form; which

to middle grades; which to later grades; and so on to the adult level.<sup>17</sup>

As we have already suggested, the validity of this conception of learning rests largely upon the accuracy of Thorndike's description of the anatomy of human nature. He, as Hall before him, has staked his case upon the findings of biology.

And biology, like a fickle maiden, seems to have played him false! It affords today little evidence to indicate that a clean-cut line can be drawn between heredity and environment, or that original learning responses are of a specific and definite character.

It is now well established, for example, that the carriers of heredity are very minute chemical packets in the germ plasm, and that a trait, such as a particular eye color, results from the interaction over a comparatively long period of time of hundreds of genes. Thus, some fifty different genes must interact to produce a red color in the eye of a fruit fly; and the altering of one of these fifty genes prevents the production of the color.

Moreover, the way in which the chemical packets, or genes, react depends upon a variety of factors: their relations to one another and also their relation to outside conditions. Consequently, the inheritance of a specific trait is dependent upon at least two conditions: (1) the presence in the germ plasm of the essential genes, and (2) the continuance of conditions within and without the organism which will enable the genes to react upon one another according to that particular pattern of behavior which is essential for the production of a specific trait.

If we keep our eye upon the second condition mentioned above, we shall observe that hereditary and environmental influences can no longer be completely isolated. Indeed, it is the environment that determines in part whether or not

<sup>17</sup> Pp. 60-61. Used by permission of Houghton Mifflin Company.

a given hereditary trait will manifest itself! Thus, it has been found in laboratory experiments that fruit flies, which inherit certain specific traits without exception under normal conditions of moist air, do not inherit these same traits when dry conditions of hatching and living are provided. In other words, as Jennings<sup>18</sup> has indicated, it is not true that we will possess a characteristic merely by "inheriting" it. All that inheritance means is that we secure from our forebears certain chemical bases of heredity which will produce particular traits under certain conditions.

Put differently this means that we receive an hereditary endowment which is always richer than our capacity to spend. Each one of us receives from his parents virtually an unlimited number of possibilities in the way of hereditary traits. All of these cannot be realized. Consequently, the environment enters to place a premium upon the development of some traits, and to discourage the existence or growth of others. In the act of educating a child, we encourage one set of hereditary traits and snuff out the chances for a place in the sun on the part of others.

It would thus appear that the line between heredity and environment has become blurred. For those who look to education as a means for ushering in a better world this is not discouraging; it is only disconcerting to those who enjoy cataloguing and classifying in advance the futures of children. These determinists in education, however, have of late been made uncomfortable by data which some of their colleagues in the field of psychological measurements have been gathering.

There is, for example, a growing body of psychological evidence to show that intelligence tests do not measure raw

<sup>18</sup> For an excellent popular account of the relationship between heredity and environment cf. Jennings, H. S., *Prometheus, or Biology and the Advancement of Man*; also an excellent article by Benjamin C. Gruenberg, "Making the Most of Heredity" in *Child Study* (March, 1929).



brain power apart from training. Thus, Dr. Paul Furfey has recently found that there is no relation between the intelligence of infants less than one year old and the social and economic status of their parents, although this relation does exist in the case of older children. Similarly, in a study of a large number of foster children in Chicago, Freeman and others found that when children were tested before placement and retested after several years of residence in foster homes, there resulted a significant improvement in their intelligence ratings. Moreover, it was also true that "the children in the better foster homes gained considerably more than did those in the poorer homes."

In the language of the investigators, these facts, as well as other data which we cannot describe here, indicate "that heredity and environment are both influential factors in the development of intelligence."

We may conclude, then, that the intellectual and emotional nature of children, as well as their physical condition, are products of two factors, endowment and environment, so intimately interrelated, so truly bone of one bone and flesh of one flesh that no surgeon's knife can separate the two and no scientist's scale can weigh one apart from the other.

In one sense, of course, it matters little whether a pupil's intelligence quotient derives from heredity alone or from heredity plus environment. In either case it represents his present working capital. Nevertheless, a teacher's attitude toward a pupil is less fatalistic and predetermined when he knows that the pupil is what he is by virtue of his training as well as his native ability. If a pupil's failure is ascribable to his training, the teacher is more likely to seek further for controllable factors in the child's learning.<sup>10</sup> And the

<sup>10</sup> For an excellent discussion of the relation of disabilities to intelligence test scores, and ways of dealing with these disabilities, cf. Dearborn, Walter F., *Intelligence Tests*, Houghton Mifflin Co., 1928, Ch. V.

science of education reveals daily new possibilities in the way of control and modification through remedying defects, such as curable reading disabilities, inadequate teaching and learning at critical junctures in the pupil's education, or unfortunate adjustments with his elders and his fellows.

We can draw no definite conclusions, then, regarding a child's native endowment. Nor can we assume that his first learning activities proceed along specific lines of behavior laid down in his nervous system in the form of preformed bonds between situations and responses.

In a recent book, *The Process of Human Behavior*, Mandel and Irene Case Sherman summarize as follows the conclusions that emerge from careful studies of the infant's first responses:

The first overt bodily reactions of the new born infant are simple sensori-motor responses which are strikingly undefined, uncoordinated and aimless. With the increase in age and experience these reactions of the bodily musculature become guided and usefully coordinated, indicating that most of the complex behavior of the growing infant is the result of a direct learning activity rather than the manifestation of inherited modes of response. Out of the vague, undifferentiated behavior of the infant are built up the characteristically adaptive responses seen later in life.<sup>20</sup>

<sup>20</sup> *The Process of Human Behavior*, p. 61. W. W. Norton and Company. These authors also show that the reflex actions of infants which have commonly been thought of as automatic and uniform develop according to the characteristics of the learning curve. In other words, even the simplest reflexes assume their character from the combined influence of the maturing and environmental circumstances. As evidence of this conclusion they cite the differences that occur in the extent and rapidity of the pupillary contraction with increasing age in infants. "When this response is observed from birth it is found that its adequacy increases up to about thirty hours of age, after which the reaction is good in most cases. This rapid increase in the adequacy of the reaction exemplifies a greatly accelerated learning process during the first hours of the infant's exposure to changes in lighting conditions . . . the response of the pupil to light is markedly inferior in a new born infant to that in an older infant. Since the pupillary response does increase in adequacy, and no differences in the structure of the reflex arc appear, the change in the reaction must be a result of the growing experience of the infant" (*Ibid.*, pp. 73-74).

It is fair to state, then, that contemporary investigations into the nature of learning seem to indicate that learning does not proceed along the lines of preformed paths in the nervous system<sup>21</sup> and, in consequence, that both the culture-epochs theory with its explanation of children's behavior in terms of a recapitulation of racial history and Thorndike's conception of original nature as an involved mass of specific tendencies to action are equally inadequate. It is probably more accurate to conceive of learning as a process of interrelationship between the child and his environment of such a character that not only are reactions in the learner coördinated and adjusted effectively and efficiently with reference to each other, but the situations in the environment likewise take on clearness and definiteness, become known, through the accumulations of experience.<sup>22</sup>

The implications for education of this new point of view are far reaching. Within the limits of this chapter we can only formulate briefly certain outstanding consequences upon teaching procedure that should follow therefrom.

In the first place it is recognized today that the extent and the character of a pupil's learning depend upon his identification with the work in hand. The Herbartians sensed the importance of this truth when they stressed the importance of interest, and in recent years advocates of the project method have preached the sound doctrine that learning is vital only when present activity grows out of present interests and backgrounds. In practice, however, devotees of the project method have tended to give

<sup>21</sup> K. S. Lashley's experiments upon learning seem now definitely to establish the fact that learning and habits are "not dependent upon any finely localized structural changes within the cerebral cortex" and that mechanisms of integration of behavior "are to be sought in the dynamic relations among the parts of the nervous system rather than in details of structural differentiation." Cf. *Brain Mechanism and Intelligence*.

<sup>22</sup> Cf. Bode, B. H., *Conflicting Psychologies of Learning*, Chs. XIV-XVI.

a one-sided emphasis to children's spontaneous interests. They have advocated *following* the interests of children much more than *guiding* these interests. This over-emphasis represents a reaction to the adult conception of learning with its imposition upon child life of adult learning materials. The truth would seem to lie somewhere between the two extremes. It is neither a question entirely of starting, or even following, a child's interest or of forcing upon him predigested subject matter of adult concern. The function of the school and the teacher is to provide the child with learning experiences appropriate to his level of development and to introduce him to these experiences in such a way that he appreciates and understands their significance and importance, and thus identifies himself with whatever may be the task in hand. If the pupil spontaneously purposes to investigate the causes of the slavery controversy, for example, and proceeds from this to present problems of racial relationships, well and good. But it may be that his learning will be equally vital if the teacher in conversation and otherwise leads him to sense a problem of which he was previously unaware, and thus starts him upon a line of study and thought that may literally reorganize his conceptions of his relations to other people. Similarly, routine matters, such as accurate weighing and measuring in a laboratory, or careful spelling and punctuation, may be made vital purposing when a teacher reveals to a child the significance of these attainments in the ordering of his life.

In this sense it is not sufficient to say that all learning begins with a problem. It is better to say that all learning should be purposive to the learner. Learning activities must be appropriate for the child to cope with at the time proposed. He should not be expected, for example, to drill upon complex sentences before he thinks and expresses himself in complex sentences. But there are large areas of

vital and significant learning, which the pupil will recognize as being of importance for him, that will not arise spontaneously out of his experience. It is the obligation of teachers (and of supervisors to aid teachers) in such cases to anticipate a pupil's purposing and to introduce him to these matters so that he enlists himself in the effort to incorporate them in his life.

This function of the teacher as a motivator of pupil activity is not identical with the mechanical conception of establishing relations between situations and responses. We have stressed rather the teacher's obligation to bring about wise and effective pupil purposing. The intelligent teacher will hesitate to bring about uniformity or a standardized expression to this purposing too early in the process of learning. As Mandel and Irene Sherman indicate:

Numerous experiments have been carried out upon animals and human beings to determine the effect of guidance upon learning, and in many cases it has been found that learning takes place more quickly and more thoroughly when guidance is not given. Some of these experiments have shown that guidance, if limited in amount, may be an aid when introduced early in the learning process, but that too much guidance, or guidance that is instituted late, is detrimental. When given early, it prevents the development of non-useful habits and encourages helpful ones, but when given late it may be confusing rather than beneficial. These results have a direct relation to children's learning and their ability to meet new situations. Usually children are hampered by too much guidance in their learning processes. As a result, they become too dependent upon it and fail to develop the initiative necessary for meeting new problems.<sup>22</sup>

The conclusion is not that pupils should receive no guidance, but rather that the direction given them should become incorporated within their purposes. Here again it is a matter of felt significance for the pupils. Just as the

<sup>22</sup> Sherman, Mandel and Sherman, Irene C., *op. cit.*, p. 109.

teacher plans to stimulate pupil activity along worthy lines, in order that the pupil may embark whole-heartedly upon an educational adventure, so habits of study and most efficient procedures should be presented as opportunities for carrying on his plans economically and effectively. When thus sensed, pupils will be eager to appropriate these tools and to add them to their working equipment.

Specific responses and well-controlled habits thus follow, rather than characterize, the first stages of learning. No conscientious teacher can remain indifferent to the methods of work his pupils are acquiring. In a later chapter we shall indicate the limitations of an individualized instruction that provides little opportunity for a teacher to observe carefully the way his pupils work, as well as the results of their work. Adequate teacher-pupil relationship involves attention to both factors. But in his desire to have his pupils acquire proper methods of work, the modern teacher keeps clearly before himself and the pupil the instrumental character of these processes and skills. They, too, take on vitality and meaning because they are visualized as parts of a larger purpose. When thus viewed, diagnostic tests and carefully devised remedial instruction occupy an indispensable place in an educational program of self-initiated and self-directed learning.

A third characteristic of the learning process is its social nature. John Dewey has expressed this principle in his well-known statement, "habits are social functions." The effects of schooling thus become both a fact and an ideal. The individual in this modern world tends more and more to attain to his individuality as a member of a group. Consequently, it is incumbent upon the school to organize life within the school so as to develop a sympathetic and intelligent regulation of conduct with reference to others.

This appreciation of the social significance of learning is

merely an application of the fact to which we previously called attention, that a vital interrelationship exists between the individual and his environment, and growth consists in a progressive reorganization of experience resulting from the interplay between the self and its surroundings. Psychology thus stresses increasingly the influence of the environment in giving character to the individual. This tends to erase, as we have seen, the lines between nature and nurture. Similarly, the conventional divisions between the compartments of our nature, the physical and the mental, the emotions and the intellect, are being removed. This means that the intellectual development of the individual may be conditioned upon many factors which traditional education ignored. Of recent years mental hygiene, in revealing the significance of emotional factors in education, has made distinctive contributions toward a more inclusive understanding of pupils. A child's progress in school for example, is found to depend upon a healthy emotional environment as well as upon the possession of a satisfactory I. Q. Indeed, it is well established that emotional conditions frequently influence expressions of intellectual power so as to cause scores on intelligence tests to fluctuate. Psychiatrists, mental hygienists, and visiting teachers who have worked with problem children have accumulated data from case histories sufficient to indicate the need, if we would deal wisely with a child, for supplementing the information furnished by intelligence tests, educational tests, and academic records with a knowledge of his emotional development.

We thus see that our theories of original nature and of learning affect materially our attitudes toward education. Under the little-adult conception of training, the child and the adolescent are as putty in the hands of the teacher. The educational watchwords are discipline and preparation for adult living. The recapitulation and culture-epoch theo-

ries shift emphasis to pupils' interests as expressed through racial urges and instincts. This stimulates an effort to understand pupil behavior and to adopt measures of guidance appropriate to the characteristics of this behavior, but it surrenders control of growth to the past. It sanctions acquiescence and resignation on the part of a pupil's elders rather than the exercise of genuine guidance. Thorndike, with his insistence that instinctive actions be carefully scrutinized under controlled observation, has brought about a steady evaporation of instincts, but he urges upon us his S→R bond conception of learning, a mechanical explanation which places a premium upon external control and manipulation of educative activities. By identifying preformed bonds with "determiners" in the germ plasm, educators are encouraged to believe that they can determine the legitimate limits of a child's education before it begins. By conceiving learning to be no more than establishing relations between situations and responses, it puts the seal of approval upon teacher-dominated procedure and rather discounts the value of pupil-initiated and pupil-directed classroom activities.

Further investigations into the character of original nature tend, however, to emphasize the undefined and uncoordinated character of the learning responses. The learner's activity is the starting point of education and his identification with its course is essential at all stages. This calls for direction and guidance, but not for formation at the hands of the outsider. The healthy education of the individual depends upon his increasing the range and the character of his sensitiveness to stimulating factors and upon his acquiring control over his reactions, so that he can both adjust himself to certain aspects of his environment and alter other aspects of it. Guidance thus becomes essential and indispensable, but the wise teacher, as the wise parent, is careful to determine when to suggest and when



to refrain from direction. He recognizes that the learner's initiative is all important at the start and at each stage of his journey. And finally, contemporary psychology emphasizes the unity of the individual. It no longer divides his intellect from his emotions, or his physical nature from his mental. It pictures the self as being in dynamic relationship with its environment, and man's mental life and emotional nature as phases or aspects of what is essentially an organic whole.

This broad conception of the nature of the child and the forces that influence his learning should constitute the background of the supervisor in his relations with the pupils of the secondary school. He must concern himself, obviously, with their intellectual progress, but he can no longer conceive of the intellect as isolated from living contact with other portions of the child's nature or with the environment in which children live, move, and have their being.

This wider conception of the psychology of learning we shall attempt, in the following chapters, to apply to specific problems of supervision, such as the classification of pupils, individualizing instruction, measuring pupil progress, analyzing and diagnosing pupil difficulties, and relations between the school and the home.

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## CHAPTER XIII

### PROVIDING FOR INDIVIDUAL DIFFERENCES AMONG PUPILS — ABILITY GROUPING

One of the most perplexing problems which confront the secondary-school supervisor is that of making adequate provision for individual differences among pupils. Even a cursory examination of the literature in the field of secondary education will reveal the fact that the problem is occupying the attention of educators generally, and that no final solution has been worked out. Various plans, such as ability grouping, individualized instruction, and the coaching of laggards, all have their enthusiastic advocates, but in spite of much experimentation designed to demonstrate the effectiveness of particular procedures, we are forced to admit that the problem of how to adapt the schools to the individual differences of pupils is still a vital issue. Without a doubt, it requires further study, experimentation, and a reëxamination of the fundamental conception of the learning process which underlies much of our current emphasis upon mass instruction.

The problem of individual differences has, of course, always been with us. However, there are certain factors which have served to accentuate its significance and importance. Chief among these is the development of the mental- and achievement-testing movement, with which the names of pioneers such as Binet, Cattell, and Thorndike are linked. These tests serve to reveal in a most striking manner the wide variation among individuals with respect to what is popularly known as "general capacity" and specific aptitudes and abilities. In no division of our educational sys-

tem are these differences more marked than in the secondary schools where, as A. A. Douglass, in summarizing the findings of the psychologists, points out:

It is now known that the ablest pupils in an unselected class of thirty will be able to solve five times as many algebra problems in a certain space of time as the poorest pupil. He will probably be able to read silently twice as many pages in ten minutes, and he is likely to have a vocabulary containing 50 to 100 per cent more words. Similar differences exist for practically every ability that has been measured.<sup>1</sup>

A factor which has made the problem more acute is the unprecedented growth in the popularity of secondary education. When one considers that the secondary school, which was designed originally to train only the selected few to become leaders in the church and state, has now become the great agency for the education of the masses, it is evident that the character of the student body has undergone marked changes. Statistics indicate that in continental United States in 1890 the ratio of high-school students to the general population was one to three hundred twelve, while in 1926 it was one to thirty-one. During this period many attempts have been made to meet this change in the selective character of the high-school population, but it is still true that much of the curricular material and many of the teaching procedures now used have been carried over from the period in which the secondary school was a highly selective institution. It is obvious that this fact is responsible for much of the present maladjustment among secondary-school pupils.

It should be emphasized also that the newer conception of the learning process, which was discussed in the previous chapter, has had a marked influence in centering attention

<sup>1</sup> *Secondary Education*, p. 195. Used by permission of Houghton Mifflin Company.

upon the individual learner rather than upon the group. This shift in the center of attention has had the effect of regarding the individual as an active dynamic organism, rather than as a passive absorber of information. John Dewey sums up this new viewpoint in the following classic pronouncement, which was made more than a quarter of a century ago:

The child's own instincts and powers furnish the material and give the starting point for all education. Save as the efforts of the educator connect with some activity which the child is carrying on of his own initiative independent of the educator, education must be reduced to a pressure from without. It may, indeed, give certain external results, but cannot truly be called educative. Without insight into the psychological structure and activities of the individual, the educative process will, therefore, be haphazard and arbitrary. If it chances to coincide with the child's activity, it will get a leverage; if it does not, it will result in friction or disintegration, or arrest in the child nature.<sup>2</sup>

While much of Dewey's emphasis has been placed upon social development of the individual, yet the above statement, together with many similar ones which were made subsequently, has undoubtedly been of the greatest importance in encouraging educators to make more adequate provision for the recognition of individual differences. Our present purpose is to examine and appraise the attempts which are being made to convert Dewey's conception of the nature and needs of the individual into actual classroom practice.

While there are many procedures which may be utilized for the purpose of meeting the problem of individual differences, ranging from the division of large classes into two or more sections upon the basis of some measure of general ability or special aptitude to highly individualized programs

<sup>2</sup> "My Pedagogic Creed." From a reprint published in the *Journal of the National Education Association*, XVIII (December, 1929), p. 291.

of instruction in which the special needs and abilities of every child are taken into account, they may be readily classified into two general groups.

First, there are those plans which retain the traditional class organization for purposes of the recitation, and secure relative homogeneity through classification of the pupils into ability groups. In some instances this plan is supplemented by making special provisions for the coaching of backward pupils. The second plan eliminates the recitation period wholly or in part and attempts to differentiate upon the basis of the individual rather than the group. That is, pupils are permitted some flexibility either in rates of learning or in the choice of material which constitutes the curriculum. In a few instances, we find unique combinations of these two general plans. That is, relatively homogeneous groups may first be secured, after which the instruction is placed upon an individualized basis.

The present chapter is concerned with the first of these major procedures — ability grouping.

This plan of providing for individual differences is easily the most popular one, if one may judge from its extensive use. The results of a questionnaire study made by the United States Bureau of Education and reported in *School and Society*<sup>3</sup> are indicative of its rather general adoption. Among the cities of 10,000 to 30,000 population, 119 out of a total of 163 use the plan in some or all junior-high-school classes, while only 8 use it in some or all senior-high-school classes; among the cities of 30,000 to 100,000 population, 57 out of a total of 89 use it in some or all junior-high-school, and 36 in some or all senior-high-school classes; and among the cities with a population of 100,000 or over, 28 out of 40 use it in some or all junior-high-school, and 26 in some or all senior-high-school classes.

The most common basis for the classification of pupils is

<sup>3</sup> XXV (February 5, 1927), p. 158.

the so-called intelligence or mental test. By those extremists who advocate the use of this single criterion, the tests are presumed to measure native capacity, or "raw brain power," and this native factor in turn is assumed to measure and to define the limits of the pupil's abilities in all subject-matter fields. That is, if the pupil scores high on the group intelligence test, or tests, which are administered, it is assumed that he is likely to be superior in history, English, science, or mathematics. Consequently, he is placed in the superior group for all of his work. So firmly intrenched in some quarters are the assumptions referred to above that, in some schools, the intelligence rating made upon the basis of a single group test when the pupil entered school is used during his entire school career for the purpose of determining his classification.

The assumption that the intelligence tests, individual or group, measure "raw brain power"<sup>4</sup> is, of course, open to serious question. As a matter of fact, they actually measure only the *present* responses of the individual along the lines prescribed by the test itself. That is, if the test is mainly

<sup>4</sup> For a general survey of the literature of this much discussed field, the reader is referred to the following sources:

Bishop, Owen, "What Is Measured by Intelligence Tests?" *Journal of Educational Research*, IX (January, 1924), pp. 29-38.

Burks, Barbara S., "Summary of Literature on the Determiners of the Intelligence Quotient," *Twenty-seventh Yearbook*, National Society for the Study of Education, Part II, pp. 248-353.

Dearborn, W. F., *Intelligence Tests*.

Dunlap, Knight, "Mental Tests," *Progressive Education*, VII (March, 1930), pp. 37-67.

Freeman, Frank N., "The Influence of Environment on the Intelligence, School Achievement, and Conduct of Foster Children," *Twenty-seventh Yearbook*, National Society for the Study of Education, Part I, pp. 101-217; also, *Mental Tests*, pp. 181-186.

St. John, Charles W., *Educational Achievement in Relation to Intelligence*, Ch. II. (NOTE: This chapter presents an excellent survey of the entire field.)

Thayer, V. T., "Heredity and Environment in Education," *School and Home*, XIV (January, 1930), pp. 16-20.

linguistic in character, it tends to measure the present linguistic ability of the student. On the other hand, if it is made up largely of material of a non-linguistic character, then the result is an approximation of the present ability of the individual along that line. This is but saying that the "tests test what they test." Since most mental tests are a composite of several types of experience which is supposed to be common to all individuals, what is measured is the individual's present ability to respond satisfactorily in a wide variety of situations. The present learning of the pupil is, then, made the basis for an inference that such learning is directly proportional to his native capacity.

The supporters of this inference depend largely for proof upon the numerous studies which have been made dealing with the constancy of the I. Q., which indicate a rather high degree of consistency over long periods of time with the same individuals. On the other hand, the opponents of the view point out that, while the I. Q. is constant *on the average*, yet individual cases show wide variation due to radical changes in environmental factors, such as school and home conditions, or health. These variations, so it is claimed, are sufficiently significant to overthrow the inference that the tests measure native capacity. Certainly, if the schools propose to deal with pupils as individuals rather than merely as members of a group, then individual variations in behavior must be taken into account. The generalization that the I. Q. is constant "on the average" is important, but not necessarily applicable in individual cases. The only safe course for the educator to pursue is to regard the intelligence-test score as *one* indication of the pupil's present accomplishments. Deficiencies which are revealed may be attributed to many causes, some of them remedial. Hence the intelligence-test rating should be regarded merely as the starting point for further investigation and study of the individual.



A more important problem arises when the relationship between the intelligence-test score and the ability of the pupil to succeed in general or special lines is examined. Regardless of whether or not the tests actually measure native capacity, if they are to be used as the basis for classification of pupils into homogeneous groups, it must be shown that they do succeed rather well in placing pupils in groups appropriate to their learning capacities.

As aids in solving this problem, two types of experimental studies are available. The first one deals with the general problem of the relationship between intelligence and achievement without respect to the problem of actual classification, while the second one deals more specifically with the problem which we are discussing. However, both have a very definite bearing. Space does not permit an analysis of these studies, nor is such an analysis necessary since the conclusions have been very well summarized by investigators in the field.

One of the most significant studies of the first type, made by Charles W. Odell, deals specifically with the problem of *Predicting the Scholastic Success of College Freshmen*.<sup>5</sup> This study sought to determine the relationship of the scores made by 12,000 high-school seniors in the Otis Self-Administering Test of Mental Ability, Higher Examination, Form A, to (1) their high-school marks, and (2) their success as college freshmen. The final data include a rather thorough study of over 1600 cases. Odell in reporting his conclusions and comparing them with other similar studies says:

Combining the evidence from all the studies along this line with which the writer is familiar the statement seems warranted that in general a score on any one of the best intelligence tests and the proper high-school mark have about equal value in predicting probable freshman marks. In each case the general expectation

<sup>5</sup> University of Illinois Bulletin, No. 37.

concerning the size of the coefficient of correlation is that it will be somewhere between .40 and .50, though under the best conditions one can reasonably expect to secure at least some simple correlations of .60 or higher.<sup>6</sup>

Charles W. St. John<sup>7</sup> has recently completed a similar study dealing with approximately 900 children (Grades I to VI) in the public schools of a suburb of Boston. He used a composite criterion of intelligence made up of Stanford-Binet and group intelligence-test scores, and compared it with various criteria of achievement, such as standardized tests and teachers' marks. He summarizes his findings as follows:

The facts shown by this study and most directly bearing on the relation between intelligence and educational achievement are stated in Section A of this chapter. Very broadly summarized, they indicate conclusively (1) that between I.Q. and the quality of educational achievement there is clearly a positive correlation, probably of the general order represented (when allowance is made for the limitations of the achievement tests and the observed characteristics of the teacher's marks) by an  $r$  of approximately  $+.50$ ; (2) that school progress is correlated positively with I. Q. to a marked degree, not determined in terms of any single index; (3) that in both the quality of achievement and the rate of progress through the grades there are many and often marked exceptions to the general rule of correlation; (4) that the achievement of boys is in all respects lower, on the average, than that of girls, and the correlations between I.Q. and achievement are also lower for boys; (5) that educational achievement is much less constant ( $r$  about  $+.45$ ) than is I.Q. ( $r$  about  $+.90$ ); and (6) that on the one hand the marks in effort and on the other hand the achievement test scores correlate with other achievement criteria about as highly as I.Q. does.<sup>8</sup>

<sup>6</sup> University of Illinois Bulletin, No. 37, p. 33.

<sup>7</sup> *Educational Achievement in Relation to Intelligence*. Harvard University Press.

<sup>8</sup> *Ibid.*, p. 147.

It would appear from these studies that, while the correlation between intelligence-test scores and general achievement is positive, yet it is too low to serve the purpose even of a general classification of pupils.

Other investigators dealing directly with the problem of classification have, for the most part, come to the same conclusion. Breed and Breslich<sup>9</sup> of the University of Chicago studied this problem and concluded that neither composite intelligence-test scores nor those made on the "best" of the intelligence tests afford a satisfactory basis for classification, and that so-called intelligence is only one of a number of significant factors in achievement. F. D. Brooks<sup>10</sup> studied the value of fifth- and sixth-grade marks as compared with certain group intelligence tests as the basis for classifying junior-high-school pupils and concluded that a balanced criterion made up of both intelligence test scores and teachers' marks was desirable.

Stuart A. Courtis of the Detroit Teachers College reports some highly significant conclusions bearing directly upon our problem.<sup>11</sup> After studying the performance of children grouped upon the basis of general mental ability, he concludes that "children of each level of intelligence, as shown by scores in mental tests, have a very wide range of achievement and very different rates of progress in any specific skill." This fact is conclusively demonstrated when the achievement of individual pupils as measured by achieve-

<sup>9</sup> Breed, F. S., and Breslich, E. R., "Intelligence Tests and the Classification of Pupils," *School Review*, XXX (January and March, 1922), pp. 51-56; 210-226.

<sup>10</sup> Brooks, F. D., "Sectioning Junior High School Pupils by Tests and School Marks," *Journal of Educational Research*, XII (December, 1925), pp. 359-369.

— "The Accuracy of Group-Test Mental Ages and Intelligence Quotients of Junior High School Pupils," *School Review*, XXXIV (May, 1926), pp. 333-342.

<sup>11</sup> "Data on Ability-Grouping from Detroit," *Twenty-fourth Yearbook*, National Society for the Study of Education, Part II, pp. 141-147.

ment tests is determined. Courtis describes the situation thus:

In both the initial and final tests, the greater the ability of the pupils, the larger the number of positions they occupy with reference to the standards in the different subjects. Not only do children not fall into groups of relatively equal ability in all subjects, but the training given in the Detroit schools tends to increase rather than decrease the diversity. The number of children who maintain a constant position in all subjects is very small, approximately 8 per cent at most. *Half the children are in at least three different positions with respect to standards in the five subjects under any form of mass instruction.*<sup>12</sup>

Courtis's conclusions are supported by those of Carleton Washburne in studies made at Winnetka. The following is a summary of his findings:

Ability grouping usually assumes first, that intelligence quotient and school progress go hand in hand, and second, that a child who is good in one subject is good in all. While both of these statements are often true, both are also often false. Within the gifted group and within the middle group no correlation was found in Winnetka between intelligence and individual progress ( $r = .07$  and  $.08$  respectively). It is only when children are lumped indiscriminately that positive correlation appears and then only in such amount ( $r = .587$ ) as to leave many individuals for whom there is no apparent relation between school progress and intelligence.

The Winnetka data on the relation of school progress in one subject to that in another show the same thing. The coefficient of correlation between reading ability and arithmetic ability is .75, that between reading and formal language (punctuation and capitalization) .79, and that between formal language and arithmetic .86. While all of these are positive and high, they still leave many cases of individual children for whom there is no relation between progress in one subject and that in another.<sup>13</sup>

<sup>12</sup> *Ibid.*, p. 147 (italics not in original).

<sup>13</sup> "Data on Ability-Grouping from Winnetka," *Twenty-fourth Yearbook*, National Society for the Study of Education, Part II, p. 153.

Since both Courtis's and Washburne's studies are concerned with the progress of pupils in the elementary schools, we may consider with profit a carefully controlled experiment in sectioning French classes at the University of Illinois, conducted by James B. Tharp.<sup>14</sup> The scores made in the Otis Advanced Intelligence Scale, when correlated with first-semester grades, gave a coefficient of only  $.32 \pm .05$ , which of course is entirely too low for predictive purposes. Even when correlated with the results of carefully prepared final examinations of the "new and old types combined," the coefficient was only  $.38$ , which the author concludes is "further evidence of the low degree of relationship between intelligence and language ability."

The reason for the lack of a relationship sufficiently significant for prognostic purposes between the scores made on group-intelligence tests and ability to progress in certain subjects is to be found in the very nature of the intelligence test. As has been pointed out, it measures performances of the most *general* sort, whereas what is needed in sectioning is an instrument which measures ability to succeed in specific subjects. As Knight Dunlap suggests, "in the general intelligence test we attempt to determine the aptitude for any old thing — a relatively impossible task."<sup>15</sup> On the other hand, it is obvious that:

In general, the closer the test material to the materials in which success is to be predicted, the greater the certainty of prediction. This is, in fact, the basis of superiority of the "trade" test over the "general" intelligence test.

There is no doubt that the best prognosis of an individual's ability to acquire along a certain line is to be found in his success in acquisition along the same line under known conditions. If we wish to predict the child's ability to acquire arithmetical skill, the

<sup>14</sup> "How Shall We Section Beginning Foreign Language Classes?" *Modern Language Journal*, XIII (March, 1929), pp. 433-447.

<sup>15</sup> Dunlap, *op. cit.*, p. 67.

best basis is in the arithmetical skill he has already acquired. For example: If two children have had equal training in geography, and one is more proficient than the other, there is a *probability* that the one will do better in arithmetic than the other, with the same apparatus and application. But if the test has been based on equal application in arithmetic, and one is more proficient, there is a certainty that the one will do better than the other in further arithmetical application.<sup>10</sup>

The difficulties involved in the use of the intelligence test as the basis for classification have led many investigators to turn to other criteria of selection. Among these is the use of the achievement, or special-aptitude, test. Comparing the effectiveness of such tests with that of the group intelligence tests, Tharp, in the study to which reference has been made previously, found that the *Iowa Placement Examination* (Foreign Language Aptitude), when correlated with the semester marks, yielded a coefficient of .62, which is considerably higher than that yielded by the intelligence tests. While it is no doubt true that foreign-language ability is more highly specialized than certain other types, yet it illustrates clearly the principle so well stated by Dunlap.

However, if we look at this principle more closely, we may raise reasonable doubts as to the effectiveness of sectioning upon the sole basis of an aptitude or achievement test, for at best it is only *one* indication of the student's ability to achieve in a certain field. Without a doubt a more complete picture may be secured by taking into account the entire range of past performances in this field. This implies, of course, the use of the much-maligned teacher's judgment as expressed by marks of various sorts. In this connection Tharp's study is also significant. He found that controlled teachers' marks, given after six weeks

<sup>10</sup> *Ibid.*, p. 66.

of study, yielded higher correlations with semester grades than did the achievement-test scores. With some shifting after the initial period, the homogeneity of the sections was materially increased. His final conclusions are as follows:

Previous language grades are reasonably reliable as a basis for sectioning if they have been controlled by some uniformity of standards and methods of measurement. Beginning students may be sectioned with some degree of accuracy on the basis of an "Aptitude" test at the beginning of study and avoid changing classes after getting started with one teacher. More accurate is the sectioning done on controlled grades after a month or six weeks of actual study. A combination of the two plans could be worked out: immediate sectioning on an "Aptitude" test and correction of the displacements at the end of a month by promotion and demotion.<sup>17</sup>

The above findings with respect to the value of grades in predicting success tend to be corroborated by a comprehensive study by Clay Campbell Ross.<sup>18</sup> He analyzed the individual record cards of a total of more than seven hundred pupils who completed the eighth grade in a certain city, over a period of four years. A composite score made up of the various factors included on the record card was correlated with the average standing in the first year of high school. For the four successive eighth-grade groups studied (1916-1919) the coefficients were as follows: .68, .67, .56, .65. In a recent article, Ross and Hooks<sup>19</sup> survey the entire field and conclude that the study referred to above, as well as certain other studies of a similar nature, all tend to support the conclusion that a composite of the various factors in the pupil's grade record is a very valuable, in

<sup>17</sup> Tharp, J. B., *op. cit.*, p. 449.

<sup>18</sup> *The Relation Between Grade School Record and High School Achievement.*

<sup>19</sup> Ross, Clay Campbell, and Hooks, N. T., "How Shall We Predict High School Achievement?" *Journal of Educational Research*, XXIX (October, 1930), pp. 184-195.

fact the *most* valuable, basis for predicting high-school achievement in the first year of the senior-high-school, the correlations averaging over .60.

While these studies were not made in connection with the classification of pupils, yet they do indicate rather clearly the need for taking into account as many factors as possible in order to insure a reasonable degree of homogeneity with respect to achievement.

Perhaps the most elaborate system for securing a composite criterion for classification is that which is advocated by Ryan and Crecelius.<sup>20</sup> The directions for recording the data used in sectioning are reproduced below:

#### DIRECTIONS FOR RECORDING DATA ON DIAGNOSIS CHARTS

##### *Items to be entered at top of card*

- Name.....Write last name first.  
Sex.....Print the Letter M or F on line.  
Adviser.....Leave space blank.  
School.....Write the name of the elementary school.  
Health.....Use E, G, F, or P. This rating is obtained from the family physician.  
I.Q.....Divide mental age derived from intelligence test by chronological age at time test was taken.  
Test .....Write name and form of intelligence test used.  
Rank .....Write a fraction to indicate the pupil's rank in class and the number of pupils enrolled. It is better to rank each class separately than to rank two or three classes in the same school as a unit.

##### *Items to be entered in Section L*

- Date.....Give year and month when intelligence test was made.

<sup>20</sup> Ryan, H. H., and Crecelius, Philipine, *Ability Grouping in the Junior High School*. New York: Harcourt, Brace & Co., 1927.



Intelligence.....	Give raw score and mental age in years and months, e.g., 13:5.
Chronological .....	Give chronological age in years and months, e.g., 14:2. This should be the age of pupil at the time intelligence test was taken.
Dentition.....	Give dentition age in years and months, e.g., 12:6.
Height .....	Record height in inches and quarter inches.
Weight.....	Record weight in pounds and quarter pounds.
Social .....	Give an approximate social age in years.
Arithmetic Fundamentals.....	Record score made on arithmetic test.
Reading Rate .....	Record rate score made on reading test.
Reading Comprehension.....	Record comprehension score on reading test. <sup>21</sup>

These data are then used for the purpose of dividing the pupils tentatively into groups.

For a class of 400 pupils, the authors propose the following groups:

- (1) The upper fifth, which is divided in one "A" and one *Top* "B" group.
- (2) The middle two-fifths, from which are formed four "B" groups.
- (3) The lower two-fifths, from which pupils are recruited for four "C" groups (two mixed, one composed of boys, and the remaining one of girls).
- (4) "Rapid Promotion" and "Adjustment" groups which are recruited from the "C" groups. These groups progress through the junior high school at different rates, ranging from two years in the case of the

<sup>21</sup> *Ibid.*, p. 102.

"A" group, to three years in the case of "C" groups.<sup>22</sup>

An interesting deviation from the various criteria for grouping pupils according to ability is afforded by a number of schools which attempt to group pupils according to their interests. Lou L. LaBrant<sup>23</sup> reports an experiment conducted in the Oread Training School, University of Kansas, in sectioning pupils in senior-high-school English. The experiment had for its primary object the selection of a special group of students who were fond of reading and who, as a consequence, would "profit by work of a sort entirely beyond that of the average high-school class." Tests in vocabulary, rate of reading, comprehension, and intelligence were administered. In addition, the teacher's judgment of the pupil's ability in interpreting literature, and of his reading habits, as evidenced by reading done principally during the summer vacation and consequently not offered for credit, was utilized as a further criterion. In this manner a "free reading group" was selected which achieved far more than would have been possible had the ordinary means of sectioning been employed. This type of sectioning, according to the author, made possible a type of work which is closely related to the objectives of English instruction, which "place increasing emphasis upon the acquisition of extra-classroom habits, prominent among which are correct usage and reading for pleasure."

Certain of the preprofessional courses at the Fieldston school of the Ethical Culture Society are also organized upon the basis of interest. In this case, it is the vocational interest which determines the particular section of English, history,

<sup>22</sup> Ryan, H. H., and Crecelius, Philipine, *Ability Grouping in the Junior High School*. New York: Harcourt, Brace & Co., 1927, p. 132. For details as to the procedure in the formation of groups, see Chapter X.

<sup>23</sup> "Certain Criteria for Classifying Pupils in Literature Classes," *School Review*, XXXV (June, 1927), pp. 458-466.

science, or art in which the pupil is placed. The work in certain subjects is organized in terms of its peculiar significance in the vocation in which the pupil is interested.<sup>24</sup> While these courses are not, strictly speaking, examples of ability grouping, yet they do illustrate a type of classification which promises to reorganize the school more nearly in accord with a very vital aspect of individual differences — namely, vocational interests.

From the foregoing discussion it would appear that there is no royal road to homogeneous sectioning. The only safe plan is to consider, not a single measure, but all the evidence which is available, and to provide fully for constant shifting from one section to another upon the discovery of apparent displacements.

Up to this point the discussion has been concerned chiefly with the *possibility* of securing relatively homogeneous sections by various means. We have touched only incidentally upon the question of the effectiveness of such a procedure in providing better learning conditions for the groups as a whole, and the further question of its adequacy in actually meeting individual interests and needs. Unfortunately, the experimental evidence bearing upon these questions is very meager and of a conflicting nature. Miller and Otto made a very careful analysis of twenty of the leading experimental studies in the field upon the basis of grades included,

<sup>24</sup> For a full account of this new approach, see the following articles: Smith, Herbert W., "An Experiment in Secondary Education," *Progressive Education*, V (October, November, December, 1928), pp.367-370.

Thayer, V. T., "The Reorganization Movement and the Progressive Secondary School," *Progressive Education*, VI (April, May, June, 1929), pp. 127-131.

It should be noted that in certain other courses segregation is not made upon the basis of interest. That is, the various individual interests are provided for within the same class group. This is made possible by the unit procedure in which the pupil is encouraged to make applications to the field of his special interest. In these courses the aim is to find ways of developing different abilities within a common setting.

methods of grouping, methods of evaluation, reliability, and results. The following conclusion is reached by these investigators:

While the evidence is contradictory, at least two of the studies suggest that ability grouping is quite ineffective unless accompanied by proper changes in method. Unless adaptation of methods and materials is a necessary correlate to ability grouping, one of the purposes is defeated. Homogeneous grouping makes possible but does not insure such adaptation. The tendency, all too often, is to use exactly the same method for the different sections. Unfortunately we do not yet know enough about differences between methods of instruction for the different levels of ability to make proper adaptations. . . . If one were to make a final summary . . . one would have to say that, so far as achievement is concerned, there is no clear-cut evidence that homogeneous grouping is either advantageous or disadvantageous. The studies seem to indicate that homogeneous classification may be effective if accompanied by proper adaptation of methods and materials.<sup>25</sup>

James B. Tharp, whose studies have been previously discussed, concludes as follows:

Sectioning is quite profitable in beginning languages where there are sufficient classes to apply it. It is quite beneficial to superior students and they like it, and their teachers like the kind of classes they get. It is also beneficial to students of less ability, but it is doubtful whether there is enough gain in "Low" classes to overcome the considerable disadvantages. Two way sectioning, therefore, seems the more practical, and if the "high" students are permitted to advance as rapidly as they are able and to proceed toward objectives not possible to a mixed group in a limited time, the "average" and "poor" students are not at all harmed by their absence and are able to reach new levels of achievement, higher than they would have done in heterogeneous grouping.<sup>26</sup>

<sup>25</sup> Miller, W. S. and Otto, Henry J., "Analysis of Experimental Studies in Homogeneous Grouping," *Journal of Educational Research*, XXI (February, 1930), pp. 95-102.

<sup>26</sup> *Op. cit.*, p. 448.

As an example of the conflicting conclusions afforded by the experimental evidence, it is of interest to note that the above findings are in decided disagreement with those reached by Roy O. Billett,<sup>27</sup> who made a very carefully controlled experiment in sectioning students in a ninth-grade English class. Classification was made upon the basis of a mental test; and the initial and final achievement was measured by means of an extensive battery of achievement tests. His results indicate "a definite advantage for slow segregated groups, a slight advantage for medium segregated groups, and a disadvantage for bright segregated groups."

*The Twenty-fourth Yearbook* <sup>28</sup> reports a large number of attempts at homogeneous grouping. In the summary of these reports appears this statement:

All these data, gathered by five groups of investigators working independently, point to this conclusion: children do not fall into natural ability-groups and cannot be classified so as to yield homogeneous grouping; groups which appear relatively homogeneous at the time of classifications soon vary more within themselves than they do from each other; different types and amounts of instruction are required by different children within each group; ability-grouping does not solve the problem of adjusting schools to individual differences.<sup>29</sup>

While sweeping conclusions concerning the effectiveness of ability grouping in adequately meeting the need for pro-

<sup>27</sup> Billett, R. O., "A Controlled Experiment to Determine the Advantages of Homogeneous Grouping," *Educational Research Bulletin*, VII (April 4, 18, and May 2, 1928), pp. 133-140; 165-172; 190-196. Experiments included are a part of a larger investigation reported in an unpublished Doctor's Dissertation, entitled *The Value of Homogeneous Grouping*, Ohio State University, 1929.

<sup>28</sup> *Op. cit.*, pp. 141-166.

<sup>29</sup> *Ibid.*, p. 166. (NOTE: For an excellent summary of the experimental evidence from a number of studies, see: Lincoln, Edward A., "Ability Grouping in Theory and Practice," *School and Society*, XXX (October 5, 1929), pp. 447-453.

viding for individual differences among pupils are unwarranted at the present time, it is possible with some degree of assurance to draw some tentative conclusions from the confusing array of evidence. These are presented by way of summary.

First, it is clear that ability grouping of pupils only increases the homogeneity of the individuals within the group. The nature of this homogeneity will, of course, depend upon the criteria employed in sectioning. For example, pupils who are capable of advancing approximately at the same rate in learning a foreign language or in a class in literature may be grouped together. Similarly pupils with similar vocational interests may be grouped together in a class in practical arts. Assuming for the moment that our criteria of selection are accurate and that we have a sufficiently large group, say two hundred fifty pupils, it will be possible to group them into ten sections of twenty-five pupils, each one of which will differ significantly from the other sections — the differences depending upon the criteria employed. That is, the groups will differ significantly in intelligence quotients, specific subject-matter achievements, study or reading habits, physiological maturity, interests, or conduct. At the same time, it will be readily admitted by the most enthusiastic proponents of ability grouping that within each group will be found significant differences, even in lines most closely related to the criteria used. Hence, the plan is only a partial solution of our problem. We are still confronted with such significant differences as to warrant further provisions for the development of individuality.

Second, it may be seriously questioned whether or not complete homogeneity of any sort (granting the possibility of attaining it) is necessary or desirable in all types of work. For example, if a plan of individualized instruction is adopted which provides for individual rates of learning and the de-

velopment of individual interests through differentiated assignment in fields such as the physical and biological, as well as the social sciences, certain phases of English, the fine and practical arts, and the like, a spread of abilities may be highly desirable. They afford opportunity for a wide range of interests and viewpoints to find expression in individual and group work. In other words, a certain degree of variety in abilities, interests, and needs is essential to the full attainment of the objectives of instruction.

Third, in fields where homogeneity actually furthers the objectives of the work, the criterion for grouping becomes the most important consideration. For example, in the languages, where rate of reading and comprehension are of vital importance, it is no doubt desirable to secure as much homogeneity as possible. For this purpose, the instruments used must be sufficiently accurate to mark off the desired abilities. The implication of this principle is that a balanced criterion, made up of as many as possible of the factors directly related to the abilities which are to be marked off, should be used. This would seem to eliminate the intelligence test as the sole criterion for any type of classification.

Again, in certain fields, the particular intellectual or vocational interests of the student may be the most desirable points of orientation of a given course. Certain types of work in English or science certainly come under this category. Where this is the case, classification should be made primarily upon the basis of such interests.

Fourth, in situations where the supervisor is confronted with very large classes, and administrative difficulties make it impossible to institute a thoroughgoing program of individualized instruction such as that which will be proposed in the next chapter, as an intermediate step in the direction of a more adequate solution, a general program of grouping according to ability might be justifiable. How-

ever, before any plan is adopted, the whole problem of meeting individual differences should be studied. If a plan of ability grouping is finally decided upon, then a comprehensive basis for group differentiation must be worked out. This should include all of the many factors which have been found to be significant in individual prognosis. In developing this composite criterion, it must be remembered that, in the last analysis, the teacher's judgment, made in the light of a thorough knowledge of the pupil's work, must be the determining factor.

Having granted the feasibility and desirability of sectioning in certain cases, we are now confronted with the very difficult problem of determining how to proceed from this point. In general, two courses are open to us. First, we may maintain the traditional recitation system without curriculum or method differentiation, and depend upon the "natural" benefits of grouping to show themselves. The experimental evidence bearing upon this procedure seems clear — ability grouping does not guarantee better results. Second, we may adjust our curriculum and our methods of instruction to the abilities and needs of the various groups. Where this is carefully done, there is every possibility that better learning conditions will be provided.

However, if we accept the conclusion that ability grouping is only the starting point for providing for individual differences, or at least a transitional stage in the process, then our major emphasis should be placed upon individual differentiation rather than group differentiation. Ability grouping will then come to have a wider meaning and will be utilized only to the extent that it facilitates better individual adjustment: that is, when extreme ranges of abilities or interests actually interfere with the program of individualization.

Our next chapter will consider the various plans which are being employed to provide adequately for individual differences in abilities, needs, and interests.



## ADDITIONAL READINGS

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## CHAPTER XIV

### PROVIDING FOR INDIVIDUAL DIFFERENCES AMONG PUPILS — INDIVIDUALIZED INSTRUCTION

In our previous chapter we concluded that ability grouping offered only a partial solution of the problem of individual differences among pupils. Regardless of the criteria which we use in sectioning or the skill with which we apply them, there still remain many significant differences in pupils' abilities, interests, and needs which should be taken into account in planning an educational program. Ability grouping is, thus, only a transitional stage in the movement toward the adequate recognition of the individual. Further development must recognize the pupil rather than the group as the basis for differentiation.

This recognized need for discovering and fostering the uniqueness of the individual, of taking his interests and needs as the point of departure in the educative process, has led to growing doubts on the part of many educators as to the adequacy of the traditional class organization or recitation system.

Mass instruction as carried out in the traditional recitation plan must of necessity ignore the individual. Instruction is levelled at the mythical "average pupil," who is taken as the standard. The slow pupils are raised to this level while the bright ones are reduced to it, thus becoming, as has been pointed out, the real "laggards" in our schools.

The major emphasis of the teacher must of necessity be placed upon the imparting of information and the inculca-

tion of specific habits and skills.<sup>1</sup> Only in a limited way does the recitation procedure provide for actual participation in activities with which the pupils have genuinely identified themselves, and which they are carrying on because of a direct interest in the outcome. Consequently, problem solving, development of independent interests, real socialization manifested in terms of dynamic ideals and standards of conduct, are all subordinated to the achievement of standardized outcomes. This is true, not because of any desire on the part of the teacher to limit the growth of the pupil, but because of the inflexibility of the system, which tends to crush out individuality and in the end to defeat genuine social development.

The laboratory procedure in the sciences, even though frequently it has been used as a means merely of "verifying either what the teacher has stated in previous lectures or what the pupil has learned" from textbooks, points the way to a solution of the problem. Here the pupils are not intent upon listening to the teacher or reciting to him, but upon solving a problem or exercise which at least has the possibility of being a vital intellectual challenge, rather than merely knowledge to be acquired. While it cannot be said that plans of individualized instruction are patterned after the science laboratory technique, yet the similarity between the best science laboratory practice and the technique of individualization is striking. Many institutions have even borrowed the science terminology, styling themselves as "laboratory schools."

Individualized instruction as a means of breaking the lock-step system of education and thereby helping to solve the problem of individual differences received its first impetus in 1888 from the work of that educational pioneer,

<sup>1</sup> For an analysis of the philosophical, psychological, and biological conceptions which form the basis of group instruction methods, see: Thayer, V. T., *The Passing of the Recitation*, pp. 1-28.

Preston Search, then superintendent of schools in Pueblo, Colorado.<sup>3</sup> The recitation system was abolished and pupils were permitted to progress at their own rates of speed. The major efforts of the teachers were directed toward the advancement of the slower pupils. The plan seems not to have gained much headway, for "few persons did more than bask in his inspiration, then continue in their old ways."

The late Frederic Burk appears to have been the first to devise a definite technique for individualized instruction and promotion. The plan, as carried out in the elementary training school of the San Francisco State Teachers College in 1913, provided for the complete abolition of class assignments and recitations. Self-instructional materials in the fundamental subjects were developed by the faculty and placed in the hands of the children. This made possible the keeping of accurate progress records and afforded a basis for remedial instruction and promotion. The plan has met with continued success, and has been used as the basis for the development of other techniques for meeting individual needs of pupils. Chief among these are the plans developed by two of Burk's coworkers, Carleton Washburne, of Winnetka, Illinois, and Helen Parkhurst, Director of the Children's University School of New York. These two plans, together with that worked out by Henry C. Morrison, in the University of Chicago Laboratory School,

<sup>3</sup> For an account of this pioneering attempt at individualizing instruction see the following:

Search, P. W., *An Ideal School*.

— "Individual Teaching: The Pueblo Plan," *Educational Review*, VII (February, 1894), pp. 154-170.

— "The Pueblo Plan of Individual Teaching," *Educational Review*, VIII (June, 1894), pp. 84-85.

— "Individualism in Mass Education," *National Education Association Addresses and Proceedings*, 1895, pp. 398-411.

For a brief historical sketch of the individualized instruction movement, see: Ryan, H. H., and Crecelius P., *Twenty-fourth Yearbook*, National Society for the Study of Education, Part II, pp. 19-30.

are representative of the many present-day attempts to recognize more fully the abilities, interests, and needs of pupils. We shall, therefore, present a brief analysis and evaluation of each of them.

The Winnetka Plan, as developed by Washburne at Winnetka, Illinois, a suburb of the city of Chicago, was the first definite attempt to apply Burk's individual technique to a city school system. With the assistance of a staff of competent and enthusiastic teachers, Washburne has developed a highly specialized technique which is designed to make it possible for pupils to acquire the "common essentials" needed in life by means of "self-instructing material." The pupil moves forward at his own rate, checking his advancement through the curriculum by means of objective tests and scales.

The fundamental assumption underlying the Winnetka Plan is that there are two distinctly different kinds of curricular material. The first "deals with knowledges and skills" needed alike by everyone, no matter what may be his station in life; the second gives opportunity for creative self-expression and group activity.

The distinctive feature of the Winnetka Plan is, of course, the procedure for dealing with the "common essentials." The group activities do not differ materially from those carried on in our modern schools, except that they are quite divorced from the individual work. It is, therefore, appropriate to examine in some detail the justification for this partitioning of subject matter. Washburne justifies the procedure as follows:

. . . Every child needs to know certain elements of arithmetic, needs to be able to read with a certain speed and comprehension, needs to spell certain common words, needs to know something about those persons, places and events to which reference is constantly made. Since every child needs these things, and since every child differs from others in his ability to grasp them, the

time and amount of practice to fit each child's needs must be varied. Under the old régime, in the effort to give different children the same subject matter in the same length of time, the quality of the children's work, the degree of their mastery, varied from poor to excellent, as attested by their report cards. But under the Winnetka technique of individual education, instead of quality varying, time varies: a child may take as much time as he needs to master a unit of work, but master it he must. The common essentials, by definition, are those knowledges and skills needed by everyone; to allow many children, therefore, to pass through school with a hazy and inadequate grasp of them, as one must under the class lock-step scheme, is to fail in one of the functions of the school.<sup>3</sup>

It should be emphasized that this first division of the curriculum is exactly the same for everyone and is based strictly upon a "ground-to-be-covered" conception. Since it is made up of the "essentials," it varies from year to year only to the extent that new discoveries of "essentials" are made. It is, to use a popular designation, a "frozen curriculum." Through this material, which may be quite divorced from the child's present interests and needs, the child moves as rapidly as his ability warrants. As Washburne says:

No child ever "fails." Nor does one ever "skip a grade." If in June a child has not finished his grade's work, in September he goes on from where he left off. If a child can do more than a grade's work a year, he does so—but he does *all* the work, without skipping any. The child is on a piece-work basis, not a time-work basis. He gets the habit of mastering each thing he undertakes.<sup>4</sup>

The other division of the curriculum is very different. Here there are no set goals to be attained, no subject matter, as "ground-to-be-covered," to be learned, no particular knowledges and skills to be acquired. Creative work in

<sup>3</sup> *Twenty-fourth Yearbook*, Part II, p. 79.

<sup>4</sup> *Ibid.*, pp. 80-81.

fine and practical arts, projects in journalism, dramatization, field trips, and group activities of all sorts, prompted by the needs and special abilities of individual pupils, claim the attention of the children during those portions of the morning and afternoon sessions not given over to the individualized program.

The Winnetka Plan undoubtedly has made significant contributions to educational method. The experimental data which have been gathered with much care over a long period of time have called attention, in a very striking manner, to the wide range of abilities among school children with respect to rate of learning. These data have done much to afford a rational justification for the recognition and treatment of those individual differences which are usually ignored in the traditional program. It has stimulated experimentation in both the curriculum and method fields to the end that public school systems are modifying their procedures in such a way as to give more recognition to the individual.

At the same time it must be pointed out that inherent in the Winnetka program are difficulties which must be taken into account by those who would utilize it as a remedy for our present lock-step system.

The plan places an undue emphasis upon what are termed the "essentials." It is assumed, for example, that it is more essential for every child to know the number combinations than to possess the right attitude toward conduct; that certain historical facts are more necessary to the child than the development of the disposition to solve social problems reflectively. As a matter of fact, a strong case might be made for regarding knowledge and skills as secondary in importance to the acquisition of ideals, attitudes, and appreciations, if one considers the adjustments demanded in a complex social environment. Fortunately, however, it is not necessary to oppose one set of values



against the other, when it has been so well demonstrated that both may be secured simultaneously in the normal processes of acquiring experience. The progressive schools have made a distinct contribution in showing how much that is of value educationally may be secured indirectly or instrumentally by centering upon vital worth-while experiences which have their own justification, so far as the pupil is concerned, quite apart from common essentials. This does not mean that drill upon "essential" knowledges and skills is eliminated, but on the contrary, that it is raised to the level of a genuine educative experience by providing for it in a social context, or at least in a reflective thinking situation.

It may be seriously questioned whether the compartmentalization of educational values — that is, the separation of essential knowledge and skills from attitudes, ideals, and appreciation — is not too great a price to pay for the securing of a self-instructing and testing curriculum through which pupils may travel at different rates of speed. Techniques which make possible the integration of experience and which regard learning as a unitary process would appear to be more fruitful if we are to attempt the difficult task of vitalizing education.

The Dalton Plan, which is perhaps the most widely known of all plans for meeting individual differences among pupils, differs sharply from the Winnetka in certain significant particulars. In the first place, the curriculum is not compartmentalized as is the case at Winnetka, and, consequently, no emphasis is placed upon the mastery of common essentials in the form of knowledges and skills, apart from other desirable learning products. In the second place, while the child progresses at his own rate, he is required to budget his time in order to provide for the accomplishment of the jobs required each month in all of his subjects. For example, he cannot begin the second month's assign-

ment in mathematics until he has finished the first month's assignment in all subjects.

There are three fundamental principles underlying the Dalton Plan, which, according to Miss Helen Parkhurst, who originated the plan in the schools of Dalton, Massachusetts, were developed at the inception of the plan in 1911. These are as follows:

*First, Freedom; Second, Coöperation and Interaction of Group Life, or Community Living; and Third, The Proportion of Effort to Attainment, or Budgeting Time.* Principle One is common to many education experiments as a prerequisite and it has had many advocates. By "freedom" I mean freedom to work without interruptions in order to pursue an interest and in order to develop concentration. As applied to an individual, it is understood to mean that he is to be freed from those habits or conditions which enslave his life or impede his complete development.

In the use of principles Two and Three, the laboratory plan, now generally known as the "Dalton Plan," antedates other educational experiments. These two principles are therefore to be considered as the plan's contribution to educational procedure.

Theoretically there is "nothing new under the sun"; and practically, the only new thing in the Dalton Plan is its departure from old school practices and the new procedure instituted to introduce the second and third principles into the school.

It may be well to note how the second principle, *i.e.*, the interaction of group life or community living, is brought about. Instead of the usual grade rooms and grade teachers, we have subject laboratories and specialists; instead of confining the pupils of a single grade to one room, the pupils of four or five grades have access to as many laboratories and are permitted to go from subject laboratory to subject laboratory, *mingling and living*, within the school, while engaged in school pursuits, just as the community outside school lives and works. It is impossible for an individual pupil, an individual teacher, or an individual class under the Dalton Plan to live independently of others. Here we put in operation Dewey's theory that "A democratic education is not merely to make an individual an intelligent participant in the life of his immediate

group, but to bring the various groups into such *constant interaction* that *no individual, no economic group, could presume to live independently of others!*"

Every school has a stated amount of time in which to do a given amount of work and so, in accordance with the third principle (proportion of effort to attainment, or budgeting of time) we map out the work for each class in the form of a job and permit individual pupils to budget the time allotted for a month (laboratory time) according to the demands of their individual needs and difficulties.<sup>5</sup>

The assignments covering a period of twenty days in all the subjects of a given grade constitute the pupil's contracts, or jobs. The work of each subject is thus divided into twenty units or "problems." Hence, if the work of a grade consists of five different subjects, 100 units would constitute the "job" for the month. In most Dalton schools these "job sheets" are developed some time in advance of their use by the teachers of the various subjects acting as a group. In this manner the interrelations between the subject matter in the various fields are brought out clearly in the "job sheets."

The school day, in a Dalton school, is divided into three periods. The first is known as the organization period, during which the pupils plan their work for the day. This period varies from 15 to 30 minutes, depending upon the number of announcements to be made, and the need for guidance in planning. The second period, which is known as the laboratory period, varies from two to three hours in length, depending upon the school organization. During

<sup>5</sup> *Twenty-fourth Yearbook*, Part II, pp. 84-85. For a complete exposition of the Dalton Plan the reader is urged to read Miss Parkhurst's book entitled *Education on the Dalton Plan*. The plan, with certain modifications, has been applied to a large public secondary school by Lucy Wilson. Her procedure is set forth in her book, *Educating for Responsibility*. This book also contains an excellent bibliography of the Dalton Plan (pp. 151-157).

this period, the pupil works upon his assigned unit in the laboratory of his choice. Ordinarily he is free to visit as many of the subject laboratories during the course of a period as he desires. The third period, which varies from 30 to 40 minutes, is known as the conference period. During this period, the subject-matter specialist conducts a conference dealing with certain phases of the work with the pupils of a given group. Thus, in a typical Dalton school, a pupil would first go to his organization period, where he would report his plans for the day and receive such suggestions as the teacher or group cared to make. He would then go to one of the subject laboratories, say English, where, directed by his "job book," he would work out as many units as he desired. He might spend the entire morning in this one laboratory, completing five or more units. On the other hand, he might finish but one unit of English, after which he would go to some other laboratory, spending the remainder of the period there. The only limitation upon his freedom during this period is that he may be called by any of his teachers for a special conference. At the close of this period he would attend the scheduled conference of his group. For example, if he carried five subjects, he would ordinarily have one conference per week in each subject. The remainder of the school day is given over to assembly, athletics, and various extra-curricular activities.

The Dalton Plan must be credited with many contributions to educational practices. First, like the Winnetka individualized technique, the Dalton Plan must be commended for the contribution which it has made to experimentation and consequent modification of educational practices. The fact that it is easily adapted to the traditional curriculum has led to its rapid growth, both in the United States and Europe. Thus, while this does not solve the curriculum problem, it does serve to encourage departures

from traditional procedures. Second, anyone who has visited a Daltonized school is immediately struck with the marked good which has come from the abolition of the recitation system. The increased spontaneity of the pupils is quite evident as they go about their tasks freed from many of the unnecessary restraints imposed by the traditional school. Third, the plan makes possible, within certain limits, adequate provision for differences in *rates* of learning.

Our examination of the Dalton Plan would be incomplete were we to fail to point out some dangers and difficulties which should be recognized by those who seek to apply it. First, the necessity for preparing job books in mimeographed form, long in advance of their use, tends to contribute to a fixed and inflexible curriculum which consists of assigned tasks made with too little reference to present pupil interests and needs. Since the very essence of the plan is the recognition of individual rates of learning, the pupils of a given grade will be working upon several different assignments. Thus, at a given date, say November first, pupil A may be working on the October job, while pupil B will be ready for the January assignment, and pupil C, who worked ahead last year, may be finishing the April assignment. This means that assignments for the entire year must be worked out several months in advance. Then, too, since a strong feature of the plan is the correlation between the various subjects, the assignments in one subject cannot well be materially changed.

In the second place, the plan makes very meager provision for individual differences in *interests*. In general, all pupils pursue exactly the same curriculum. True, some schools provide for "special assignment sheets," but these are apt to be as formal and inflexible as the regular ones since they are not usually made for the individual pupil. Other schools provide special oral assignments as the need devel-

ops, but it should be pointed out that this is supplementary to the plan, rather than a part of it.<sup>6</sup>

In the third place, the unit in the Dalton Plan is a "time unit" rather than a comprehensive "learning unit," such as is provided for in the Morrison plan. Generally speaking, a unit is the amount of work which the teacher would ordinarily assign for one day's recitation. An examination of typical Dalton contracts will indicate that the emphasis is usually placed upon a time, or a ground-to-be-covered basis, rather than upon the solution of a comprehensive problem or the achievement of a changed attitude. This lack of provision for reflective thinking is perhaps the most serious defect of the plan. Setting the problems, a stage so vital to reflective thinking, must of necessity be confined to what may be included in the mimeographed guide sheets. There is no opportunity for discussion between the teacher and the group concerning a given problem, since at best only a few pupils are ready for an assigned problem at a given time. The result is that all too frequently the pupil approaches the "problem" and carries it out merely as an assigned task, without really seeing its significance or identifying himself with it. No matter how complete or elaborate the guide sheet, it cannot provide, in and of itself, the proper basis for real interaction between pupils and teacher. This difficulty may be taken care of adequately if the unit is made the basis for individual variation. Later discussion will illustrate this point more fully.

In the fourth place, since the guide sheet is of necessity limited in extent and made for the "average" pupil rather than for a particular pupil, difficulties in directing study are bound to arise. Few pupils develop proper habits of

<sup>6</sup> Perhaps the most successful plan of meeting this need for differentiated assignments is that which is employed in the South Philadelphia High School for Girls. Sample units providing for elective work are given in Lucy Wilson's book which has been referred to previously.

study without careful direction. The inadequately motivated assignments and the lack of opportunity for close supervision of study habits by the teacher may result in careless and slipshod work. It is true that the pupil is free to go to his teacher when he senses a difficulty, but all too often he *does not sense it*. He thinks he is following directions, only to find, when his work is "checked up," that he did not fully comprehend. He has wasted much time which might have been saved had there been free interplay between pupils and teacher *before* the work was begun, and careful supervision of his work in the initial stages of the development of the unit.

It is not held that these difficulties are necessarily inherent in the plan or that they *all* exist in *all* Dalton schools. They are presented as possible dangers which should be taken into consideration if the plan is to be properly safeguarded.

The Morrison Plan as developed at the University of Chicago High School by Dr. Henry C. Morrison and his staff<sup>7</sup> is based upon an entirely different conception from the plans discussed above.<sup>8</sup>

True learning is regarded "not as ground covered or knowledge gained, but as adaptations" which take effect in the behavior of the pupil, such as a change in attitude, or the acquisition of a special ability. When once acquired, it is permanent except as it may be transformed into a new adaptation or rendered ineffective through pathological conditions.<sup>9</sup> A genuine adaptation is unitary in character.

<sup>7</sup> Morrison, H. C., *The Practice of Teaching in the Secondary School*. See also staff contributions in *Studies in Secondary Education*, Numbers 24, 26. Supplementary Educational Monographs.

<sup>8</sup> As distinguished from the Winnetka and Dalton Plans, this plan was developed with special reference to the needs of the secondary school.

<sup>9</sup> *Op. cit.*, p. 23. The only exception which is made to this rather sweeping statement is in the acquiring of a skill, which by definition is regarded as "facility."

Either it is achieved by the pupil or it is not. As Morrison points out:

Individuals may differ greatly in the length of time and the ease with which they take on the change which a given adaptation implies, but, if two pupils have attained a given adaptation, they cannot differ with respect to the fact of their attainment.<sup>10</sup>

For example, a pupil has attained the reading adaptation when he is able to "see through the symbolic complex of the printed page to the thought or scene or action" which the printed words are intended to convey without the constant necessity for centering attention upon the symbols. He has achieved the adaptation called for in a study of the French Revolution when he has secured "a new attitude toward the past, described perhaps as a conviction of the nature and inevitable consequences of a long period of personal government." Or, to use a more common illustration, a person can swim, not when he can make a given number of strokes, but when he can "maintain himself indefinitely in the water."

This conception of the nature of true learning, which is central to Morrison's technique, is responsible for the much repeated insistence upon *mastery* instead of mere lesson performance. This is well illustrated by the following statement:

When a student has fully acquired a piece of learning, he has mastered it. Half learning, or learning rather well, or being on the way to learning are none of them mastery. Mastery implies completeness; the thing is done; the student has arrived, as far as that particular learning is concerned. There is no question of how well the student has mastered it; he has either mastered or he has not mastered. It is as absurd to speak of degrees in mastery as to speak of degrees in the attainment of the second floor of a building

<sup>10</sup> Morrison, H. C., *The Practice of Teaching in the Secondary School*. This and succeeding quotations reprinted by permission of the University of Chicago Press.



or of degrees in being on the other side of a stream, or of degrees of completeness of any sort whatever. The traveler may indeed be part-way across the stream, he may be almost across, but he is not across until he gets there. Once across, he may continue his journey indefinitely, but he cannot continue his journey from mid-stream. The pupil may have begun to learn, we can see that he is making progress, he has almost learned; but he has not mastered until he has completely learned.<sup>11</sup>

The task of the educator, then, is to determine the sum total of the series of adaptations which ultimately will lead to the attainment of the "major products" of the secondary school. The learning units are identified and evaluated in terms of their significance in bringing about the desired organic changes in the learner. Subject matter is merely *assimilative* material which is used as a means for securing adaptation; it is *never* an end in itself. The curriculum is thus subordinated to pupil growth.

The learning unit, then, has a double aspect. First of all, it is a comprehensive "objective" principle, art, or value which may be identified as a "significant aspect of the environment, or of an organized science, capable of being understood rather than capable merely of being remembered";<sup>12</sup> and second, it implies a transformation of the learner which expresses itself in the attainment of a new attitude, special ability, or skill. This insistence upon a careful differentiation of learning products from mere assimilative material marks off the Morrison Plan from other procedures for meeting individual differences, for it affords a criterion for the selection of materials of instruction. In the other plans discussed, the emphasis is placed mainly upon convenient groupings of material from the standpoint of time to be spent or of the "ground-to-be-covered."

<sup>11</sup> *Ibid.*, p. 35.

<sup>12</sup> *Ibid.*, p. 182.

Morrison's teaching procedure in the Science Type, which shows rather clearly the Herbartian influence, consists of five more or less clearly defined steps or stages which he terms the "teaching cycle."

The first of these steps, *Exploration*, corresponds closely with the first of the Herbartian steps, *Preparation*. Its purpose is to determine the experiential background of the pupils and to "establish the 'apperceptive sequence' between the old and the new." It may take the form of an oral or written quiz or of a class discussion, depending upon the nature of the unit and other conditions.

The second step, *Presentation*, bears a striking similarity to the Herbartian step of the same name. In it the teacher "develops once and for all in its major essentials the understanding which the unit implies." This is presented in the form of a short lecture by the teacher.<sup>18</sup> This is a sketch, or better, a bird's-eye view of the unit. Details are omitted except where necessary to give the student the required understanding.

Up to this point, the class has met and functioned as a unit. Now, if the Presentation has been successful, as determined by the presentation test which is an invariable part of the step, the class is ready to attack the unit as individuals under the guidance and supervision of the teacher. This step is known as the *Assimilation* period. Guide sheets, setting forth questions, or references to suitable material are furnished in the earlier grades. In the senior high school the pupil usually shifts for himself, since one of the purposes of the school is to develop intellectual independence. It is in this period that provision is made for individual differences, not only in *rates* of learning, but also in interests, aptitudes, and needs. The students are encouraged to go far beyond the understanding required by the

<sup>18</sup> For illustration of a typical presentation lecture, see Morrison, H. C., *The Practice of Teaching in the Secondary School*, pp. 245ff.

unit and to pursue individual problems and projects bearing on the unit. In some cases they are released entirely from the *Assimilation* period and permitted to carry on work in other subjects. The period closes when the adaptation has been made by the pupils, as determined by appropriate tests. It should be noted in passing that at least in its fundamental aspects this step is not unlike the third step of the Herbartian system, *Comparison and Abstraction*. In that procedure, the pupil is supposed to arrive at the principle or abstraction implied in the individual cases (as in science) which was presented in the previous step. In the Morrisonian procedure the learning product is much the same on the objective side, though it goes much farther by insisting upon a corresponding organic change in the learner. At this point *mastery*, which is so essential to Morrison's technique, should have been attained.

The fourth step, the *Organization* period, may best be described by Morrison:

When the teacher is duly confident that assimilation has taken place, the class is again brought together for organization. Without notes, books, or documents of any kind, the pupils now proceed to gather up all their material and construct an outline in which the argument is developed in logical and convincing order. This outline may take the form of a series of topical sentences which carry the argument, or it may perhaps better be in the regular syllabus form. In the organization, the pupil is forced to assemble his thought content and to focus it upon a clear expression of his understanding of the unit. *He is not now absorbing but giving forth, no longer acquiring the new attitude but expressing it.*<sup>14</sup>

The similarity of this period to the Herbartian *Generalization* step is evident without explanation.

In the last step, *Recitation*, the class is brought together again as a social group for the purpose of affording pupils

<sup>14</sup> *Ibid.*, p. 229 (italics not in original).

an opportunity to present their views of the unit in a manner somewhat similar to the teacher's *Presentation* in the second step. While not exactly parallel, this step bears a certain resemblance to the final Herbartian step, *Application*, in which the student proceeds deductively to apply the principles learned to new and varied materials.

One other element should be mentioned in this brief discussion of Morrison's epoch-making volume.<sup>15</sup> We refer to his use of Types of Teaching. Not unlike the traditional separation of teaching technique into three main divisions — (1) acquiring knowledge or understanding (reflective thinking), (2) appreciation, and (3) drill — Morrison compartmentalizes teaching procedures into five main types, which he designates as follows:

1. The *Science Type*, in which the learning is generally in the form of an understanding developed through reflection, and the product is "an intelligent attitude toward some aspect of the environment or of a science."

2. The *Appreciation Type*, which is concerned with the emotional side of man's nature. Contributions in this field are made chiefly by the fine arts, religion, and moral behavior. The adaptation called for is a new attitude expressive of enjoyment, or "willing devotion," and sometimes of "suffering."

3. The *Practical-Arts Type*, which, as the name implies, deals with "intelligent manipulation of appliances and molding of materials," for example, courses in mechanical or household arts, drawing, painting, and the plastic arts.

4. The *Language-Arts Type*, "through which the use of written and spoken discourse is learned." This type is of principal use in English composition and foreign languages.

<sup>15</sup> There are many features in Morrison's plan which cannot be discussed in this connection. Among them are his program for dealing with problem pupils and his method of appraising pupil progress. See Chapters XV and XVI of this volume for a discussion of this technique.

5. The *Pure-Practice Type*, which is used in those fields where the learning process is largely pure repetition. Learning spelling or the multiplication tables are good examples of the use of this type.

Since the learning products and the corresponding adaptations implied in these fields differ materially one from the other, Morrison insists that they be kept entirely separate, and points out repeatedly the folly of attempting to secure, for example, an *appreciation* adaptation through the *science* technique.

The contributions of the Morrison Plan to the problem of meeting individual differences are numerous and significant. With reasonable modification to meet changing psychological conceptions and local school conditions, it has within it potentialities for regenerating the secondary school. Only a few of its outstanding features need be mentioned here.

A major contribution is the conception of the true learning unit and its corresponding adaptation which results in the acquiring of a changed attitude, or a new mode of behavior on the part of the individual. Refined and developed by constant application to living situations as the idea will necessarily be, we have a valuable instrument for freeing us from the domination of facts, information, and book learning in general. True, it is far from easy (as will be apparent to all who read Morrison's book critically and examine the tests by which he ascertains the acquisition of the adaptation) to distinguish between the actual change in attitude implied in the unit and the ability on the part of the pupil to pass a test on the subject matter which is supposed only to supply assimilative material. However, we are at least afforded a criterion by means of which the organization of subjects may be raised above the level of formal learning and developed in terms of their effectiveness in transforming the life of the learner.

The unique combination of group and individual instruction suggests the answer to the problems of excessive individualization on the one hand or complete mass instruction on the other. It also enables the teacher to guide effectively and to stimulate the learning process during the initial stages, and thus to short circuit much aimless, and sometimes blind, wandering which is so evident in many of the more individualized plans of instruction. In this technique, the differences in ability of pupils become something of an asset to the class instead of a liability, for within the unit are the possibilities for utilizing the unique contributions of all. The flexibility in time, as well as in the amount and kind of "assimilative material," provides for all degrees of speed — especially when accompanied by an adequate program for dealing with problem cases. Differences in needs and interests are likewise provided for adequately by means of differentiated assignments.

In the present unsettled condition of the secondary school, which is evidenced by the fact that there appear to be no distinctive functions which can be agreed upon as being peculiar to this division of our educational system,<sup>16</sup> Morrison's definition, which looks upon the secondary period as that period "in which the pupil is capable of study but is incapable of intellectual growth except under the constant tutorial presence of the teacher,"<sup>17</sup> provides us with a definite conception of our task, even though on the upper levels it may not serve as a very valuable criterion for determin-

<sup>16</sup> After surveying existing definitions of the secondary school, Monroe and Herriott seem satisfied to define it "primarily in terms of the middle division of an educational system, formerly including grades nine to twelve but now frequently being extended to include also grades seven and eight." See Monroe, Walter S., and Herriott, M. E., *Reconstruction of the Secondary School Curriculum; Its Meaning and Trends*, University of Illinois Bulletin, No. 41, 1928.

<sup>17</sup> Morrison, H. C., *op. cit.*, p. 7. In this connection also see Morrison's splendid article entitled "The Secondary Period and the University," *School Review*, XXXVII (January, 1929), pp. 16-28.

ing when pupils are sufficiently independent intellectually to warrant classifying them as belonging to the University period. We may at least seek to provide an environment which will aid the student in securing the major products of the secondary school: "(a) a wide range of interests and the discovery of some dominating interest, and (b) the capacity for intellectual life."<sup>18</sup>

Our discussion of the Morrison Plan would be incomplete if we failed to suggest a number of crucial points which those who are studying plans for meeting individual differences will do well to consider.

Careful students of this plan cannot but note the often repeated claim that adaptation and the corresponding mastery are a unitary thing which a student either possesses or does not possess. Morrison's illustrations on this point are far from convincing. Those which seem to verify his point most completely deal with the achievement of such special abilities as learning to swim or to ride a bicycle. However, even in these cases it would seem that the point at which adaptation is said to exist and previous to which it did *not* exist is an arbitrary one set by the instructor, rather than a psychological one, as Morrison claims. The problem of what constitutes the swimming adaptation depends entirely upon the definition which one is willing to accept for it. For example, one instructor might claim with some justification that a person is able to swim when he can take a given number of strokes under definitely prescribed conditions.<sup>19</sup> With another instructor these conditions might vary considerably. Even with Morrison's definition, which is "the ability to maintain one's self indefinitely in the water," there might be considerable doubt as to its prac-

<sup>18</sup> *The Practice of Teaching in the Secondary School*, p. 33.

<sup>19</sup> The writer put this problem to a group of physical-education instructors and the definitions varied from the ability to take a single stroke to the ability to maintain one's self indefinitely in *rough water*.

tical meaning in concrete cases. Even here, *degrees* of mastery are evident.

Attitudes of understanding and appreciation seem even more arbitrary and indefinite. As a case in point, let us consider briefly Morrison's example of the unit on the *French Revolution*, in which he states that the adaptation may be described as a new attitude toward the past, "a conviction of the nature and inevitable consequences of a long period of personal government." Is it conceivable that all would secure *this adaptation*? True, to some it might well be the outstanding lesson of the French Revolution; to others, it is conceivable that various other adaptations might be more in evidence, for example, the significance of the struggle of man for personal rights, the horrors of war, a keener appreciation of the genius of the French people, or even the need for a benevolent despot. There are many other conceptions which would actually express themselves in changed attitudes that would be the inevitable result of the careful teaching of this unit. To say that all pupils have *mastered*, or have secured a certain *adaptation*, is possible only when an arbitrary standard which all agree shall constitute adaptation, or mastery, is set up. As a matter of fact, a test which permitted the pupils free rein in expressing their convictions would indicate marked individual differences in mastery, unless some arbitrary understanding is decided upon which shall constitute complete mastery. To do so, is to interfere with the right of the pupil to reach independent conclusions. This does not mean, of course, that mastery as an ideal is not something for which to strive. However, it does seem impossible psychologically, and undesirable pedagogically, to consider it strictly in the Morrisonian sense.

A second point which should be considered is that formalism is very likely to result when the prescribed teaching steps are followed strictly as provided for in the *Science*



*Type.* The Herbartian Lesson Plan, with its strikingly similar steps, is offered as evidence of how a procedure may become stereotyped and deadly. True, there is little danger of this in the hands of a master craftsman, who always subordinates method to effective growth, but in the hands of a less skillful teacher it may not prove to be an escape from the "ground-to-be-covered stereotype," which it is designed to supplant. It may be urged by way of rebuttal that any procedure *may* become formalized. This is all too true, but certainly a procedure which involves the invariable sequence of five steps, interspersed with a vigorous testing program, is, *per se*, an admirable instrument for bringing about mechanization.

One may also question the psychological basis for these steps. To say that the pupil's background must be explored for the purpose of determining his interests and needs and of connecting them with the new problem, project, or unit, is true whether we designate the procedure as an application of Herbart's doctrine of apperception or the modern doctrine of interest. Certainly, this is an important step in the presentation of an adequate stimulus, but there seems little justification for marking it off from the *Presentation* step which is supposed to "complete the stimulus." In that type of material which is designated by Morrison as the *Science Type*, the stimulus is complete when there is a recognition of the problems of the unit, rather than when an outline or "overview" has been presented in the form of a lecture. Psychologically, the development of problems and the proposal, through group discussions, of a number of fruitful hypotheses should constitute a natural stage of learning. Consequently, it would seem indefensible to separate these two vitally connected and integrated elements in the thinking process into formal steps, especially since the second (*Presentation*) seems not to be concerned directly with setting problems and developing hypotheses, but with

the presentation of outlines and sketches which are later to be filled in by the pupil. The *Assimilation* step, though certainly an inappropriate name for a period in which the student attacks and solves problems rather than absorbs information, is defensible psychologically since it affords the opportunity for individualized learning upon a reflective basis. *Organization* and *Recitation* are essentially phases of the same movement; consequently, very frequently they could be combined to advantage. Hence, it would seem that the five steps proposed might be reduced to three without any sacrifice of essential values and that, with some modifications of technique, the procedure might be much more in accordance with the technique of problem solving.

It may be seriously questioned, also, whether or not there is psychological justification for the five distinct types of teaching proposed. To be sure, there are essential elements in the reflective thinking, drill, and appreciation techniques which should be understood and practiced by the teacher, and Morrison is right in claiming that a learning product that is essentially of one type cannot be secured by the use of some other technique. A good example of this is in teaching appreciation, where the adaptation is in the form of a favorable attitude based upon a recognition of worth, as in the case, for example, of the teaching of a beautiful poem. One would not want to approach it as a problematic situation, with suitable hypotheses, or as a drill situation involving repetition and automatic responses. To do so would undoubtedly destroy the possibility of securing the learning product which is sought. However, in the normal growth of experience there is no such separation as Morrison proposes, and from a psychological standpoint none is justified. In teaching a poem, problems will arise which afford excellent training in thinking, and drill may frequently be quite in place. Even in the most rigorous prob-

lem in science there should be an accompanying appreciative element, and the problem certainly should involve some learning of the pure practice type. For example, in dealing with density or weight in physics, the fundamental approach would undoubtedly be in terms of problematic situations, yet there would of necessity be a certain amount of drill with respect to formulæ and derived principles; and out of it all should arise a keener appreciation of the work of great men of science who played significant rôles in making organized science possible. There should also follow a keener appreciation of the way facts and principles fit into an organized system. These values are not merely incidental; they should be consciously striven for by the teacher. Consequently, there can be no logical or psychological justification for the sharp separation of types of technique.

The questions which have been raised concerning the Morrison Plan are suggested only as hypotheses which one ought to investigate and test through practice. No doubt, with modifications and refinements, the plan has within it the promise of great improvement in procedure, as well as in the organization of the curriculum of the secondary school.<sup>20</sup> Some of these modifications have been suggested in the preceding discussion. It remains to present the outline of a plan which in the main embodies these proposals.

Chapter VII, which is devoted to lesson planning, suggests the essential elements of such a teaching pro-

<sup>20</sup> Space does not permit an extended examination of the Miller Contract Plan as developed at the University of Wisconsin High School by H. L. Miller. It takes its departure from the Morrison Plan, but is less formal and develops in detail a technique for organizing the units in terms of graduated assignments to meet the needs of different ability levels. For a complete description of this plan the reader is referred to:

Miller, H. L., and Hargreaves, R. T., *The Self-Directed School*.  
Miller, H. L., *Creative Learning and Teaching*.

cedure.<sup>21</sup> Basically, as proposed above, this plan involves three phases, or periods, which may be designated as follows: (1) the *Problem Setting or Assignment* period, (2) the *Work or Testing* period, and (3) the *Organization and Discussion* period.

The first, or initial phase, deals with the group as a whole and is concerned with setting the stage for learning. Through informal discussion, carefully planned in advance, the teacher enlists the interest of the group in the learning unit which has been proposed. This is not the place for "high-powered salesmanship," exhortation, or lecturing. If the unit has been well chosen, its essential problems are not wholly new ones, but have their origin in the experiential backgrounds of the pupils. For example, a unit dealing with the Industrial Revolution and its Economic and Social Results would be approached from the point of view of the present experiences, interests, and needs of the pupils. The group already has come in contact with the colonial period in which there was little division of labor, few manufactured articles, and, consequently, comparatively little economic and social interdependence. Some of the group, no doubt, have had first-hand experience in modern industry and are familiar with its high degree of specialization and the resulting mechanization. To those who have not, some of the major problems, such as the organization of labor and capital, the perennial strife and unrest which the clash of conflicting interests entails, or the high degree of concentration and the resulting urbanization, will not be entirely outside the range of experience. Even problems of industrial democ-

<sup>21</sup> For a more complete treatment of this procedure, as well as of the theoretical bases involved, the reader is referred to V. T. Thayer's *Passing of the Recitation*, Part IV, pp. 276-329. The plan with certain modifications has been used in several courses in Principles of Education in the College of Education, The Ohio State University. For an interesting report of this work, see: Hullfish, H. Gordon, "A Problem in College Teaching," *Journal of Higher Education*, I (May, 1930), pp. 261-268.

racy, involving attempts to restore pride in one's work, and develop the "we" attitude between employee and employer, may not be entirely foreign to an alert secondary-school group. It is this experiential background which affords the raw material for setting the stage for learning. The teacher skillfully directs the discussion, now and then pausing to consult previously studied units for points bearing upon the present discussion, to entertain proposed problems and hypotheses, or to listen to the experiences of some member of the group who may have a unique contribution to make to the discussion.

This illustration from the field of the social sciences could be duplicated in any of the major fields of human activity which form the basis for secondary-school curricula.

If the unit is predominantly reflective in character, with appreciation and factual material as concomitants, this stage would be complete when the major problems of the unit had been developed and numerous proposals, technically known as hypotheses, had been suggested for solving them.<sup>22</sup> It should be noted that no attempt is here made to set up a particular adaptation. Reflective thinking is a sham unless those who think are free to follow the data wherever they may lead, regardless of the particular attitude which the teacher thinks should be developed. Inviting people to think always involves a certain element of doubt as to the outcome of the thinking. All too frequently teachers ask pupils to "think" when the outcome is fully

<sup>22</sup> It will be noted that this procedure, as applied to units of an essentially problem-solving nature, follows closely the steps in the complete act of thought proposed by Dewey, Bode, and others. Reflective thinking always involves a problem to be solved and requires that solutions be regarded as tentative until carefully weighed and tested. This phase of the procedure concerns itself with setting problems, defining, and limiting them, and the development of hypotheses. It is concerned with raising doubts, rather than settling them. Thus, the first two steps of a complete act of thought are provided for in the stage: (1) Problem, and (2) Hypotheses.

determined in advance. The development of a real social program by a student cannot be hoped for unless he is given full responsibility for reaching conclusions upon the basis of all available data.

If the unit affords rich opportunities for the development of appreciation, then reflective thinking and drill may take a secondary, though not an incidental, place, and the stage for learning would be completely set when the group saw the unit as a comprehensive whole, closely related to former experience, and sufficiently related to present and future needs to justify its mastery. The same test would prevail for material in which drill plays a major rôle.

It should be noted that this stage is broad enough to include all sorts of values without compartmentalizing the desired learning products. There is no necessity for holding to one "teaching type" throughout the unit. The teacher should be aware of the values to be sought and of the procedures which have been found most successful in achieving them, but each unit should be so organized and taught as to make possible the integrating of these values, for it is futile to talk of the integration of personality unless such integration is provided for in the curriculum and in teaching method.

The second stage, which has been designated as the *Work* or *Testing* period, is a logical development of the preceding one. If the assignment has been successful, the pupil now knows what to do and has identified himself with the task. It remains for him to carry it out. This is largely an individual matter involving investigation, experimentation, consultation of reference material, occasional assistance from the instructor, and possibly small group conferences with fellow students interested in the same problems. It is usually desirable to provide guide sheets which set forth supplementary problems and projects, minimum and supplementary reference material, as well as suggestions for the attack

and final organization of the unit. The nature and extensiveness of these guide sheets will depend upon the ability of the group to assume responsibility for planning and executing work.

In this stage the teacher acts as a helper, guide, and friend, rather than as a taskmaster, dispenser of information, or hearer of recitations. He works with individuals and groups as needs arise. He supervises study in the best sense of that term, encouraging and assisting those who need it, and proposing additional problems and projects for those who have completed the regular requirements.

Individual differences among pupils, both in speed of learning and in interests and needs, become an asset rather than a liability in this procedure. The flexibility of this period makes possible the recognition and the fostering of independent intellectual, æsthetic, or practical interests, without in any sense retarding the progress of the group. Students with widely different abilities may work side by side without the least danger of developing either attitudes of discouragement or of undue self-esteem.

This stage terminates when the majority of the individuals in the group have, in their own manner, solved the major problem of the unit<sup>23</sup> or acquired the primary adaptations involved. There should be no attempt to bring all to the same level of mastery, except, of course, in cases when certain minimum essentials are necessary for future progress in the particular field. We cannot adequately recognize individual differences and needs if, by our rigorous standardization, we insist that every pupil master exactly the same material or arrive at the same conclusions.

The third and last stage, which we have called the *Organization* and *Discussion* period, is concerned first of all with organizing the unit, usually in writing, in terms of solu-

\* <sup>23</sup> This stage corresponds to the testing, or verification of hypotheses, in a complete act of thought.

tions for problems, knowledge or skill gained, or attitudes of various sorts established. After organizing the unit, the group may properly discuss the various aspects of the work covered, conflicting points of view, implications for other fields, and the like. This is also the logical place to present the results of individual investigations in the form of problems and projects which have been developed by pupils in response to their own individual interests and needs.

Thus, in the unit on the Industrial Revolution, this phase might begin with a written report on the unit, developed in logically organized form from the viewpoint of the student. This report should indicate that he has come to grips with the major problems, that he has examined all available data, and, finally, that he has arrived at some conclusions, however tentative they may be. Uniqueness and individuality should be encouraged here as in the other stages. Thus, one report might take the form of a debate between authorities representing conflicting points of view on the labor question, another might consist of a one-act play depicting the "Development of the Machine and Its Effect on Man," which might be later dramatized, while a third might be developed as an exposition, taking as a point of departure the need for applying our democratic social ideal to industry. Because of the variation of these reports, many of them are of interest to the entire group and may well serve as the basis for the final discussion and summarization of the unit.

The individual contributions of the group should also receive attention. In addition to the general work of the unit, one pupil may have made a special study of some of the earlier machines, such as the spinning jenny or the power loom, another may have made a study of some local industrial plant, while a third may have made a special study of the problem of child labor. Brief reports of this sort will add much interest to the period and will go far



in encouraging individuality. In a unit in other fields, in literature, for example, the procedure would be very much the same, adapted, of course, to the particular outcomes upon which the unit centered. The reading of original poems or selected passages for critical comment, or for sheer delight, would certainly be in keeping with the purposes of the period. This final stage affords an excellent opportunity for practice in the social ideal of democracy, according to which each individual has an opportunity to participate vitally in common understandings and tasks.

In this brief sketch, no attempt has been made to suggest a technique for testing.<sup>24</sup> This has been purposely avoided because of a desire on the part of the writers to keep the procedure entirely flexible. In each stage some written work in the form of tests may be entirely appropriate and desirable. The objective type is undoubtedly of much value as a pretest to determine pupil backgrounds. The written report of the essay type, discussed in some detail in connection with the third period, affords an excellent opportunity for noting the development of independent thinking and originality, as well as for appraising pupil progress.<sup>25</sup> At all times the testing should be subordinate to the attainment of the desired learning outcomes.

This excursion into the field of teaching method has been made for the purpose of providing the secondary-school supervisor with a brief survey of some of the procedures for adapting the schools to individual differences. It is by no means implied that this is an exhaustive list or that any

<sup>24</sup> The amount of time to be devoted to each phase has also been left flexible. This, of course, will vary with the unit and manner in which it is developed. Ordinarily, if ten fifty-minute periods are allotted for a unit, the *problem setting* stage could ordinarily be completed in one or two periods, the *testing* stage should utilize the major portion of time, say five to seven periods, while the *organization* and *discussion* stage would require one to three periods.

<sup>25</sup> See Chapter XV which deals with the measurement of pupil progress.

school need confine itself to any of the particular plans proposed. Experimentation with a number of them is quite possible in the same school system.

Any plan which is finally adopted should be the result of long and careful study and experimentation on the part of the teaching group under the leadership of the supervisor. Among the items which such a study should include are the following:

- I. The local factors which would affect the situation.
  - (a) Class size.
  - (b) Physical equipment (especially classroom and library equipment).
  - (c) Community interests and needs.
  - (d) Pupil and teacher personnel.
- II. A survey of the literature of the field.
  - (a) Plans dealing with classification of pupils.
  - (b) Plans dealing with elimination of the recitation system.
  - (c) Plans dealing with treatment of problem pupils.
- III. Visitation of school systems using one or more of these procedures, college and university demonstration schools, etc.
- IV. Expert advice from authorities in the various fields.

In such a study the supervisor, of course, assumes a position of leadership. He will, no doubt, make much use of his department heads and various committees, which should include practically the entire teaching personnel.

One procedure which has been found valuable in appraising the various plans is to set up criteria which should be met in a progressive secondary school. This may be done through committees, which make a study of the best educational theory and practice in such fields, as (1) aims and objectives, (2) psychology of learning, (3) democratic organ-

ization and control. Each proposed plan is then evaluated in terms of these tentative standards.

In conclusion, the following criteria are proposed in order to indicate some of the principles which should be embodied in any teaching procedure that is designed to meet individual needs, and to further the general objectives of secondary education:

1. Does the proposed procedure recognize the necessity for providing for a genuine social environment in which the student develops his capacities through active sharing in the experiences of the social group, and through an understanding and appreciation of the social heritage?
2. Does it provide for the formulation of a program for living on the part of each individual through the development and constant use of the technique of reflection in the complex problems of a rapidly changing physical and social environment?
3. Does it provide for the development of a succession of independent interests—intellectual, literary, artistic, and æsthetic—which the student will pursue independently of the work of the school?
4. Does it provide, in connection with and as an integral part of the above criteria, for utilitarian values, such as prevocational and vocational interests, and the modes of response designed to meet the practical problems of living?
5. Is sufficient flexibility provided for (in teaching procedures) so as to make possible the achievement of understandings, appreciations, and skills without compartmentalizing these outcomes?
6. Does the procedure recognize that the activities of the school are based upon the principle that life is “dy-

namic, propulsive, and active," and that the present interests and needs of the student must be the point of departure and the center of reference for the curriculum and the organization of the school?

We shall next turn our attention to a problem which is closely related to that of the present chapter — the measurement of pupil achievement.

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## CHAPTER XV

### MEASUREMENT OF PUPIL ACHIEVEMENT

In primitive society, children learn the customs, ideas, and occupations of the more mature members of the social group through direct participation in these activities. "To savages," as Dewey points out, "it would seem preposterous to seek out a place where nothing but learning was going on in order that one might learn."<sup>1</sup> Yet it may be said that even under such primitive conditions, the measurement of achievement of pupils is an essential element of education. Before the youth may share fully in the life of the male members of the tribe, he has to receive certain elementary training at the hands of the women, the end of which is marked by rites and ceremonies which indicate the fitness of the individual to participate fully in adult activities. This is not fundamentally different from testing in the modern school. In practice, however, such a test is closely related to the life which the youth lives — it is part and parcel of his present and future environment. The measure of his success is determined quite directly in terms of the actual performance in which he is to engage, rather than indirectly by the evaluation of learning products quite remote from his present experience.

As civilization becomes more complex and the heritage of the race has been subjected to organization and classification by the specialist, much of what must be learned becomes relatively remote. Formal education arises and special en-

<sup>1</sup>Dewey, John. *Democracy and Education*, p. 9. By permission of The Macmillan Company.

vironments presided over by teachers are set up in order to "teach" the child. With the rise of formal education, there develops also the necessity for the indirect testing of results. Actual performance gives way to a formal testing program designed to test the acquisition of knowledge, facts, and skills in the hope that from such acquisitions may be *inferred* ability to perform the duties of citizenship which will be required later.

Testing, then, has always been a vital and necessary part of our educational program. However, the modern movement which has done much to transform our whole educational system is of relatively recent origin. The interest in the objective measurement of school achievement antedates the work of pioneers in the mental-test field, such as Cattell and Binet. According to Levine and Marks,<sup>2</sup> the movement was already under way in 1879 when Rice published his report on spelling. However, it received added impetus with the spread of the intelligence-test movement, and under the able leadership of E. L. Thorndike has developed until there are relatively few subject-matter fields in secondary education for which standardized testing material is not available.

This rapid growth of the achievement-testing movement, with its necessary emphasis upon fixed bodies of instructional material and fixed objectives of the educative process, has had the effect of perpetuating the *status quo* in society, for only as society remains static is it possible to standardize large bodies of instructional material. While it cannot be said that the leaders of the testing movement have deliberately assumed a static society and a "frozen" curriculum, yet by and large they have undoubtedly been much more concerned with the problem of building tests to fit present subject matter than in raising the more fundamental ques-

<sup>2</sup> Levine, A. J., and Marks, Louis. *Testing Intelligence and Achievement*, p. 21.

tion of the technique for testing the learning products which are demanded by the changing objectives of education. The "educational technician" in the field of testing is not fundamentally different from the "scientific curriculum" maker of the past of whom Rugg and Shumaker say:

Rarely the educational technicians questioned the existing order. They were concerned, as were their administrative colleagues, with makeshifts; with reorganization, not with reconstruction. They started with the *status quo*. They accepted school subjects. They were willing to permit the traditional algebra, arithmetic, spelling, geography, and science their definitely allotted places in the school program. They did not see American life and its problems on the one hand and the growing child and his needs on the other as important units to be integrated. Even to these new educational scientists reorganization was to be piecemeal.<sup>3</sup>

Oddly enough, as this new movement which had the effect of giving fixity and increased significance to the curriculum was growing by leaps and bounds, by its side was developing a very different point of view toward the educative process. More than thirty years ago, Professor John Dewey, in his epoch-making declaration of principles, *My Pedagogic Creed*, proclaimed an essentially new doctrine in education. It emphasized the fact that the child, his capacities, interests, and present needs, rather than logically organized race experience, should be made the point of departure and the center of gravity of the educative process. This meant a new emphasis upon individual differences, and the development of the uniqueness of the individual rather than the standardization of the individual in much the same manner that manufactured articles are standardized. This new movement has brought about a reaction to the testing movement in its more extreme forms, and has led to a searching examination of the func-

<sup>3</sup> Rugg, Harold O., and Shumaker, Ann, *op. cit.*, p. 30.



tions which tests and examinations perform in the educative process. Only when this question of the legitimate purposes served by tests is answered will it be possible to appraise the contributions which the scientific movement in testing may make.

First of all, the test and examination must aid in determining the achievement of learning products in line with the ultimate objectives of education as well as the more specific subject or activity objectives. Without some measure of this achievement we are very much in the dark as to the destination toward which we are bound.

The test may also serve as a means of diagnosing pupil difficulties and cases of arrested growth. Hence, the necessity for "pre-tests" and informal examinations in the initial stages of learning. This is especially true in the unit type of procedure, for only in this manner is it possible to know the individual differences which exist and for which adjustments in teaching procedures are to be made.

The third significant function of tests and examinations is to afford the student the opportunity of organizing and applying his knowledge, or of securing practice in specific performances. That is, the test or examination, if properly constructed and administered, serves not only as a means of determining progress in achieving objectives and as an instrument of diagnosis, but also as a true learning exercise.

The foregoing discussion has attempted to make clear the point that the problem of testing is ever with us, no matter what may be our conception of the nature of the learning process or the ultimate goals toward which we hope we are moving. In the formulation of a sound supervisory policy, therefore, the problem of the measurement of pupil achievement and the legitimate supervisory uses of such measurement is a crucial one because it vitally affects both pupil and teacher growth.

The major questions which the supervisor should consider are the following:

1. What are the valid learning products, in terms of changes in behavior, which the school should seek to achieve?
2. What devices are most suitable for the measurement of these products?
3. How should these measures of pupil achievement be used so as to promote satisfactory pupil and teacher growth in a changing social order?

Learning products in a given subject cannot be divorced from the general objectives which we hope to achieve in the secondary school. In another connection<sup>4</sup> we have stated that one of the chief concerns of the secondary school is "to foster and encourage the development of an ever-expanding outlook on life." This cultivation of a social outlook implies not only a sensitiveness to the major problems of social living, but also a disposition to solve these problems reflectively and to participate actively in the development of a social program. This centers the secondary program upon training in thinking, rather than the acceptance of standards upon the basis of tradition or authority. Facts have value, not as ends in themselves, but as data for the reorganization of experience. In connection with the development of this social outlook, the secondary school must also seek to discover and to cultivate intellectual, æsthetic, and practical interests.

The learning products which are to be achieved in a given subject,<sup>5</sup> then, consist of ideals and attitudes of understanding and appreciation which are progressively undergoing modification and refinement, and which manifest them-

<sup>4</sup> See Chapter XI.

<sup>5</sup> Each teaching group should, of course, determine the contributions which each subject should make toward the general objectives. It should also formulate the general objectives which it proposes to achieve.

selves in an ever-widening sensitiveness to social progress and an ever-increasing zeal for putting into practice the best social vision of the day; of an increasing disposition and ability to apply the techniques of reflective thinking to the solution of problems in every field of human activity; and of a wide range of habits and skills needed in the furthering of present and future adjustment. Knowledge in the form of facts and information is, as Dewey has frequently pointed out, "a mind-crushing load" unless it is acquired and utilized in furthering the reorganization of experience. The same may be said of habits and skills acquired out of contact with reflective situations. Consequently, the surest path to social progress lies in the direction of the fostering and encouragement of the special environment which abounds in situations involving constant practice in reflective thinking. Only in this manner can we provide youth with tools which will be of certain use in a world in which industrial and social changes are taking place so rapidly that one generation can hardly predict the manner in which the next generation will make its living, to say nothing of the moral and social standards which will prevail. Secondary-school activities, then, should center upon the attainment of those learning products which are most likely to lead the pupil in the direction of a vital, social outlook on life, abiding intellectual and æsthetic interests, and such other interests as are most likely to be of value in the solution of the problems of practical living.

We have pointed out that an adequate testing program is essential to the carrying out of the aims and functions of the school. Obviously the kind of program which we set up should be designed to test adequately the products which we consider important, and to further those learning activities which are considered to be most valuable in achieving the ends. Otherwise, the aims set up will fail to function and for them will be substituted the aims which

are actually implied, as Walter S. Monroe points out, in the learning exercises and the tests of achievement which the teacher uses. He says:

This statement means that the goals toward which a teacher is directing his students are determined by the exercises he asks them to do, including the questions asked during the recitation period, and the tests he administers. The teacher who asks questions calling for mere factual answers implies the objective of memorizing isolated facts. The teacher who quizzes students on the text, implies the objective of learning the textbook, which is usually interpreted to mean "memorizing the language of the author." The teacher who emphasizes reasons why, cause and effect, comparison, and organization of information implies very different objectives. The teacher of mathematics who stresses correct answers and neglects the procedures by which the answers are obtained implies objectives different from those implied by another teacher who emphasizes the methods by which the student arrives at his answers.<sup>4</sup>

Even though a teacher may earnestly desire his students to cultivate good habits of thinking and right attitudes toward life, and may devote much time to practice in these fields, much of his effort will be wasted if his testing program is not set up to determine the achievement of these ends. For example, if he confines his tests to a type which calls primarily for specific responses, which are usually of the pure memory type, he thereby places a premium upon that type of response. His students soon learn that the important thing for them to do is to memorize the facts of the textbook, for in that manner they will be better prepared for the tests which follow. He is thus influencing to a marked degree not only the learning products which are acquired, but also the processes which are used in acquiring them — that is, the study habits of the student. The naïve assump-

<sup>4</sup> *Directing Learning in the High School*, p. 75. Copyright, 1927, by Doubleday, Page and Company. Used by permission.

tion which is made by most teachers who resort to this practice is that other values which are *not* tested are present in the same degree as those which are tested. Monroe points out the fallacy of this reasoning in the following quotation:

Indirect measurement tends to change the objectives which students endeavor to attain. This results in a modification of the relation that originally existed between the abilities measured indirectly and the "other abilities" with the result that frequent indirect measurement is accompanied by a decrease in the dependability of the information secured. For example, assuming that under existing conditions the extent of the factual information possessed by the students in a history class is in close agreement with the magnitude of their other achievements in this field, the practice of measuring only factual achievements or even emphasizing these achievements in recitations and examinations will result in changing the existing relations so that the results of a test which calls only for the functioning of fixed associations (memorized facts and statements) will not constitute dependable indirect measures of other achievements in history.<sup>7</sup>

This important principle should be kept in mind as the various types of tests are examined, for we are face to face with the danger of losing the advantages which come from the formulation and use of definite, worth-while objectives which provide a sense of direction. This leads us to a consideration of our second problem, which concerns itself with the testing program itself.

In general, it may be said that in addition to the informal sort of testing which is carried on in almost all of the pupil-teacher relationships, ranging from the questions asked in the formal recitation to the informal group discussions in which the teacher participates, there are three general types of tests and examinations which should receive consideration. First, there is the so-called "essay type," second, the

<sup>7</sup> *Ibid.*, p. 479.

"new type" prepared by the teacher, and third, the "standardized type" constructed with reference to standard norms. Each of these will be treated with reference to its effectiveness in furthering the learning products implied in the objectives which have been formulated.

The first of these, the essay type, which consists at its best of questions involving the organization of knowledge and its application to the solution of problems in which the student is given wide latitude in not only the nature of the discussion but also in the conclusions reached, is well known to all. It has been in existence for centuries and will no doubt continue to be used widely in spite of the increasing popularity of the "new" and "standardized" types of examination.

As was suggested, the essay-type examination has great potentialities for estimating the ability of the student to think reflectively. This ability requires that the student be able to formulate relevant hypotheses and test them upon the basis of all available data and finally to reach at least a tentative conclusion upon the basis of these data. The setting of a genuine problem, then, affords not only a basis for determining the progress which the student is making in applying the technique of reflection, but also is indicative of the attitudes and dispositions which are evidenced by the conclusions to which he comes as the result of his reflection. It thus affords practice in achieving a learning product which is directly in line with one of the fundamental objectives of education in a changing social order.

Good educational theory requires that information, skills, appreciations, and reflective thinking be closely integrated in the learning process. Our professional writers on method have been guilty of formalizing the educative process to an extent such as to regard these learning products as compartmentalized and as if they existed as separate entities

apart from the total experiential situation.<sup>8</sup> The type of test or examination should, in so far as is possible, preserve and further this integration. Regarded from this point of view, the essay-type examination stands high, for it not only conserves this integrated whole, but also furthers it, by providing the conditions under which the student may knit together his facts, ideals, and attitudes in the form of appreciations and understandings in the development of a consistent point of view through the medium of problem solving.

Under the unit plan, where a period is given over to the organization of the unit, this point is strikingly illustrated.<sup>9</sup> The student marshals all of his data and organizes them into a logical consistent whole, expressive of his point of view. He thus reveals whether or not the change in behavior which is the "adaptation" required has actually taken place. In this type of examination, the usual procedure is to permit the student to develop the unit in his own way without the aid of questions or outlines. He brings into the discussion his own direct experience in this and related fields and develops his point of view in his own unique way, so as to further his own reorganization of experience. This achieves the same results as the formal examination but really takes it out of the "quiz" atmosphere.

The finished product may fail to reveal a knowledge of facts which the teacher considers to be significant, but this is compensated for by the insight which he secures into the growth of the pupil in ability to organize knowledge in the solution of problems, and in the development of some of the more intangible, though highly significant, products which usually escape attention. The result may lack some of the highly prized objectivity, but when con-

<sup>8</sup> For a complete discussion of learning see Chapter XII.

<sup>9</sup> For a description of this procedure see Chapter XIV. ..

sidered in its true function of discovering the individual, this deficiency becomes relatively insignificant.

If the essay type is thus identified with the significant learning products and is in accordance with good educational theory, which calls for the securing of integrated experience, why does such widespread condemnation of it exist among "scientific" educators? To understand this movement, it is necessary to consider the indictment which has led to the revolt against its use as a means of measuring achievement.

The most frequent criticism which has been launched against the essay-type examination is its lack of objectivity and reliability as a measure of the student's achievement.<sup>10</sup> Starch and Elliott<sup>11</sup> found that 116 teachers assigned marks ranging from 28 to 92 on a scale of 100 per cent to the same paper in plane geometry. Ben Wood supplies the classic example of the subjectivity of teachers' marks on essay-type examinations. The following account of his observation is reported by Douglass:

One of a group of expert readers employed in marking papers in history wrote out, as a standard by which to mark the papers, what he considered model answers to the questions asked. This became mixed in with the papers being marked and was passed on to other readers who, taking it for a paper written by a student, marked it in turn along with the other papers. The marks given to this model paper by the different readers, he states, ranged from 40 to 90.<sup>12</sup>

<sup>10</sup> For a searching examination of the entire problem of the written examination, see: Monroe, W. S., and Souders, Lloyd B., *The Present Status of Written Examinations and Their Improvement*, University of Illinois Bulletin No. 17.

For an exhaustive bibliography dealing with examinations and school marks, see: Odell, C. W., *A Selected Annotated Bibliography Dealing with Examinations and School Marks*, University of Illinois Bulletin No. 43.

<sup>11</sup> Starch, Daniel, and Elliott, E. C. "Reliability of Grading High School Work in Mathematics," *School Review*, XXI (April, 1913), pp. 254-259.

<sup>12</sup> Douglass, Harl, *Modern Methods in High School Teaching*, pp. 366-367. Used by permission of Houghton Mifflin Company.



One more illustration will suffice to indicate the general nature of these criticisms. Hulten<sup>13</sup> selected five compositions from the "Hudelson Scale," and had them mimeographed and sent to some thirty teachers of English in five different cities in Wisconsin. The teachers were told that they were written by eighth-grade pupils, and they were requested to assign them percentage grades. About a year later, the same compositions, *arranged in a different order*, were sent to the same teachers with the same instructions. The markings of the first paragraph will serve to illustrate the general results: Highest grade—84%, Median grade—68%, Lowest grade—20%, Number of failing grades—48, Number of passing grades—6, Total range of grades—64%. He found that: (1) fifteen teachers who gave passing grades in December would have failed the same pupils in February, (2) eleven teachers who gave failing grades in December would have passed the same pupil in February, (3) twenty per cent of the pupils changed from *pass* to *fail*, or from *fail* to *pass* in the two markings, (4) three teachers would have failed one eighth-grade pupil doing tenth-grade standard work.

In the main this charge of a lack of objectivity must be admitted. Personal judgment must of necessity enter into the marking of the essay-type examination. If such personal judgment is unskilled and made without reference to fairly definite standards, then much variation will be found in the scores of the same paper by different teachers or by the same teacher at different times. However, if one of the most significant functions of the tests is to afford the teacher a basis for appraising the progress which the pupil is making in the direction of intellectual independence, the development of a social program for living, or in the cultivation of wholesome appreciations, then the subjec-

<sup>13</sup> Hulten, C. E., "The Personal Element in Teachers' Marks," *Journal of Educational Research*, XII (June, 1921), pp. 49-55.

tive nature of the teacher's evaluation becomes relatively insignificant. He is concerned with watching a process of integration and reorganization, rather than with the exact measurement of each separate item of growth. His attention is centered on specific elements only as they appear as causes of arrested development, or as they stand out as noteworthy performances. He knows that many of the significant elements are not capable of precise and exact measurement, and that the evidence of their attainment is cumulative over a long period of time, to be appraised not by the result of any single test, but by an extended series of related performances. From this point of view the lack of objectivity of the essay-type test is not serious, since it serves admirably the purposes of the teacher.

It is the necessity for comparing individuals within a group, or affording a basis for "marks," which requires that attention be given to the problem of objectivity. Fortunately, it is possible to meet this requirement by various means. For example, it has been shown that the development and application of definite standards for scoring will do much to decrease the lack of objectivity. F. J. Kelly reports an experiment in which six fifth-grade teachers of arithmetic participated. A uniform examination was given and the papers marked by each individual teacher without reference to standards. A definite plan was then worked out and the papers were rescored. The results, are reported as follows:

The differences between the marks given when the classroom teachers had no standard or systematic plan and when they followed a standard are very striking. In the first instance the marks assigned by the teachers agree with those assigned by the "judge" in only 5.5 per cent of the cases, while in the second instance they agreed in 63.5 per cent of the cases.<sup>14</sup>

<sup>14</sup>This investigation was originally reported in F. J. Kelly's *Teachers' Marks*, p. 84. The above account is taken from Monroe, W. S., DeVoss,

The supervisor could very well take the initiative in working out suitable standards for constructing, giving, and scoring tests which could be applied in the various fields with modifications such as are found to be necessary.

In the development of this program the following points are suggested for consideration:

### *The Construction of Tests*

1. The established educational objectives should serve as criteria for determining the worth of a test or examination.
2. The test should be so constructed as to provide ample opportunity for the exercise of the pupil's ability to think reflectively, rather than upon the basis of the recall of information.
3. The test should be so constructed as to afford the opportunity for the free expression of the student's attitudes and ideas.
4. The test should be so constructed as to call for the use of significant data in the solution of problems.
5. The test should avoid the "ground-covered" conception by centering upon comprehensive learning units.
6. The relative values of questions in terms of the teacher's judgment should be indicated.

### *The Scoring of Tests*

1. Outlines of satisfactory responses to each question should be worked out before papers are scored. A tentative evaluation of these will do much to give uniformity of judgment.
2. Marking all answers to a given question instead of marking each paper completely will tend to minimize the fluctuation in standards of grading which are rather common. The first scoring should be tentative and subject to adjustment upon the basis of a rapid re-reading.

J. C., and Kelly, F. J., *Educational Tests and Measurements*, p. 281. Used by permission of Houghton Mifflin Company.

It is not contended that even the most carefully constructed set of standards will eliminate the subjectivity of teachers' marks. We do contend, however, that it is possible to render the teacher's judgment sufficiently accurate for ordinary purposes by such means. Monroe states this point so clearly as to bear verbatim quotation:

In other fields, opinions, frequently called judgments, are respected. The judges of our courts render opinions relative to our social and moral activities. Men engaged in business have frequent occasions to make judgments which are accepted as a basis for action. However, it should be noted that the judge has been prepared for rendering opinions by a long course of legal training. The successful banker is an "expert" in finance. One reason, probably the most potent one, why we respect their opinions is our realization that they have been trained for such work. This suggests that our lack of respect for opinions in regard to educational matters is due to the "inexpertness" of those rendering them. High school teachers have seldom received much explicit preparation for estimating achievement or for devising and using written examinations. It is not unreasonable to predict that if they were given the right kind of training for this phase of teaching they would be able to make judgments that would compare favorably in accuracy with the measurements obtained by using objective methods.<sup>15</sup>

The point of view here presented fails, of course, to satisfy the extreme advocates of "objective" measurement. This desire for so-called "scientific method," which has been carried over from the field of natural sciences, has prompted many educators to reject the essay-type examination. However, their attempt to carry over purely quantitative measurements from a field where the problem is relatively simple has resulted in an over-simplification of the testing problem. The price for "objectivity" is entirely too great to pay if it results in a failure to recognize the necessity

<sup>15</sup> *Directing Learning in the High School*, pp. 490-491. Copyright, 1927, by Doubleday, Page and Company. Used by permission.

for careful consideration of all the complex variables which enter into pupil growth. This point will be elaborated in connection with the discussion of "new" and "standardized" examinations which follows.

Paterson defines the new-type examination by contrasting it with the old. "By way of summary, we may characterize," he states, "the old-type examination as requiring relatively long explanatory written answers to a small number of 'how' type questions, whereas the new-type examination requires exceedingly short answers to a relatively large number of 'key' questions, correct answers being symptomatic of total organized knowledge."<sup>16</sup> While we may disagree with Paterson as to this type being indicative of the total organization of knowledge, yet it does serve to mark off the new from the essay type. Perhaps the more accurate way to describe the new is by stating that questions are so framed that only *one* answer is correct. This answer must be very short — usually one word. Otherwise the subjective element enters in. Thus, if one were to ask, "*Give* date of the signing of the Declaration of Independence," only one answer is possible. On the other hand, if one were to ask, "*Establish* the date of the signing of the Declaration of Independence," then the student would be required to relate the sequence of events which led up to the signing, as well as to fix it with reference to other events taking place at the same time. Obviously, the answers to this question would vary in accordance with the ability of the student to organize his knowledge. Judgment would therefore be required in grading. First of all, the teacher would have to decide tentatively what should constitute a satisfactory answer. Then he would have to decide precisely how well a given answer met the

<sup>16</sup> Paterson, Donald G., *Preparation and Use of New-Type Examinations*, p. 5. Copyright, 1925, by World Book Company, Yonkers-on-Hudson, New York.

criteria set up. Consequently, the teacher's score would be subjective in character. Such a question, then, would be rejected as unfit for use in a new-type examination.

It is obvious that the leading claim, that the new-type examination is more objective than the essay type, is a valid one when examined from the viewpoint of the ability of several teachers to agree upon the scores earned by the students. However, it must be recognized that this objectivity is, in a last analysis, only a superficial one. Assuming that the chief function of the test is to determine the achievement of certain learning products, it is possible to select many more questions than it would be possible to use, which would be symptomatic of the acquisition of those products. The teacher must use judgment in deciding what he will use — that is, he must decide "subjectively" which questions are best for his purpose. Such a decision is by far the most important one which he is required to make since it determines the basis upon which he is to determine progress toward objectives. Hence the examination which is presented to the student is almost entirely a matter of the judgment of the teachers. The objective argument, then, would appear to be built upon sand, since the test is subjective in its more significant aspects. It is much like guessing at the circumference of a plot of ground, dividing this estimate by 3.1416 and assuming that the resulting diameter is entirely objective and accurate.

Not only is the construction of the new-type test entirely a matter of judgment, but this judgment is limited to a determination of items which can be scored objectively. In the essay type he has to ask, What questions will best test the achievement of these learning products? In the "new" he must ask in addition, Which of these questions, if any, can be so framed as to make objective scoring possible? He is thus restricted to certain types of

response. Hence, while the new may cover a larger sampling of the field, it is restricted to certain items within that field.

By its very nature the new-type test places a premium upon information and facts rather than upon development of judgment, reasoning, acquisition of appreciations, and the like.<sup>17</sup> True, the advocates of the new argue that the selection of the "best" answer in a multiple choice test implies reasoning. Such an implication is hardly warranted.

The conditions for effective thinking require that the individual, confronted with a problematic situation, formulate and test hypotheses. In life, one is not confronted *per se* with ready-made hypotheses. These come largely as the result of training, and the selection of fruitful hypotheses is a mark of training in effective thinking. This point is usually ignored in the new-type examination because, were the student given freedom to *suggest* hypotheses, the scoring would no longer be objective. Again the proof of ability to think is revealed by the manner in which the student is able to marshal data and organize them with reference to his point of view. This important fact is also ignored by many of the new-type test makers. Therefore, the inference that the mere selection of the "right" response from a number of possible ones is very dangerous ground upon which to make the assertion that such tests measure the student's ability to think reflectively.<sup>18</sup> A significant

<sup>17</sup> See Burton, W. H., *The Nature and Direction of Learning*, p. 496.

<sup>18</sup> In this connection, see: Tilton, J. W., *The Relation between Association and the Higher Mental Processes*. Contributions to Education, No. 218. He attempted to determine scientifically the "relation between association and the higher mental processes" by administering tests which purported to test thinking and tests which measured the acquisition of information. The writer has found that well-trained graduate students are unable to distinguish between the two supposedly different types of tests upon the basis of the samples given in the appendix of the study (pp. 49-50). This fact may go far to explain the conclusion which Tilton reached: "We find in our data no clear evidence of any distinction (sharp or otherwise) be-

gain would be made if the attempt to secure complete objectivity were subordinated to the securing of valid measures of ability to set up and test hypotheses. Then the pupil could be confronted with problematic situations and permitted to formulate and test his own inferences. The value of the hypotheses proposed by the pupil, as well as his ability to organize data to support his conclusions, could then be appraised by the teacher. If proper criteria are set up for evaluation of the result, measures of sufficient reliability for ordinary purposes will be obtained. However, before this change in emphasis can gain much headway, the necessity and desirability of relying upon the teacher's judgment must be recognized.

It must be admitted that, in its present state of development, the new-type examination is best suited to test the acquisition of information. If we grant this contention, and also Monroe's claim that the nature of the tests used influences significantly the objectives which the students

tween extent of association and the efficiency of the Higher Mental Processes" (p. 48).

A new and very promising approach to this problem is reported by Ralph W. Tyler, Bureau of Educational Research, The Ohio State University, in a recent article: "Measuring the Ability to Infer," *Educational Research Bulletin*, IX (November 19, 1930), pp. 475-480. The plan, which has been the basis of an experimental program in the Department of Zoölogy, The Ohio State University, provides that the measurement of the attainment of *all* the objectives be given *primary* consideration; the problem of eliminating subjectivity being of secondary concern. In striking contrast to Tilton's conclusions, as reported above, Tyler finds a very low correlation between the ability to reproduce information and the ability to infer. He says: "Several persons who have constructed tests have maintained that all of the important objectives were so closely correlated with information that an information test was all that was necessary in measuring achievement. This is not true in zoölogy. The correlation between a test covering the important zoölogical information and this test of proposing inferences was found to be only .29, entirely too low to justify the use of the information test alone as a measure of both objectives. If the ability to propose inferences is an important objective of zoölogy, we must measure for it, for we cannot depend upon information tests to indicate the students' attainment of this objective" (p. 480).



strive for, then we are forced to draw the conclusion that the exclusive use of the new-type examination in its present form will tend to emphasize the acquisition of facts and skills as the true learning objectives. We are thus perpetuating a conception of education which has been rejected as being unfit for preparing individuals to participate freely in a changing social order.

We would venture to suggest in closing that the new-type examination should find its greatest use in exploring pupils' backgrounds in preparation to the taking up of new units of work, and in testing specifically for information and the acquisition of certain specific skills. Used in this manner, with a clear recognition of its limitations, it should, because of its possibilities in covering comprehensive ranges of material, result in much better teaching, particularly of a remedial sort. Basically, however, the teacher's judgment, based upon all the available data which he can gather, must be given first place in determining pupil progress. The remedy for the present shortcomings lies not in narrowly restricting that field of judgment, but in better training in the construction, giving, and scoring of tests and examinations. The question of objectivity must always be a secondary and subordinate consideration.

The above discussion applies generally to the standardized test as well, since it differs from the new type only in the fact that standards have been established for interpreting the results. This makes it possible to compare pupil achievements in one school or section with those of another, or with scores made by students generally. This is obviously an advantage, provided that the program of testing is not dominated by the use of these standardized materials, for their use in this manner is subject to the same limitations as the new type. If given precedence over all other types of testing and if the results are weighted

heavily either in determining the worth of the teacher or in determining pupil progress, the result is bound to be an unfortunate emphasis upon the acquisition of information and skill, and a consequent mechanization of the whole learning process. The standardized tests then become a substitute for the curriculum and determine in a large measure the teaching procedure and study habits of the pupils.

Since we are concerned with the problem of encouraging the general development of the individual expressed in terms of desirable changes in behavior, we are forced to the conclusion that many learning products, especially those which are designated as ideals, attitudes, and generalized habits, are not at our present stage of development susceptible of exact and objective measurement. In fact, it is exceedingly doubtful whether we are able to measure with any degree of accuracy some of the most important products which the school is organized to secure. A frank recognition of this fact will do much to save us from the sin of measuring the more obvious ones and then naively assuming, as is done in most of the experimental studies of the effectiveness of the various sizes of classes, that the unmeasured products are present in the same proportion.

Once we recognize that the judgment of a well-trained teacher, thoroughly familiar with the aims and purposes of the school, based upon all available data, is the most valid, reliable, and worth-while measure of achievement which is now available, we are on the way to a satisfactory solution of the intricate problem of measurement. In order to give free play to this judgment, it is necessary to extend the range of data rather than to restrict it by emphasizing only one kind of test — namely, that which is most obviously objective, from the point of view of the scorer. Extending the range of data means that we shall take into

account not only test results but also a score of other factors which are vital in determining the progress of the individual. The individual, rather than the group, then becomes the point of orientation, and his growth becomes the important consideration. With the teacher emancipated from the god of objectivity and standardization, careful observations of the growth of appreciations, the development of ideals of social living, of changed attitudes toward the past, and the application of desirable techniques in the solution of present problems may be made and the results recorded, not necessarily as letters and scores or as point hour ratios, but in descriptive terms.

For practical suggestions as to how to carry out the plan of discovering the individual through attention to his behavior, we are greatly indebted to H. C. Morrison,<sup>19</sup> who has done much to bring the school into proper relation with the desirable outcomes of learning. For example, in noting the development of sustained interest, the teacher, through a "personnel report," made the following observation concerning one pupil:

Reads widely in....., and frequently comes to me to talk about the books she has read. I have looked up her free-reading list and find that she has read five rather substantial volumes in the last month besides several minor but wholesome books, all of them closely related to the subject.<sup>20</sup>

This observation, which defies scientific analysis or reduction to a point scale, provides eloquent data for appraising the progress of the pupil. Another example of a sixth-grade pupil from the same source indicates a satisfactory growth in self-dependence.

Frederick has carried on a regular business of clearing sidewalks in his city block all winter. It seems to have been his own idea.

<sup>19</sup> *The Practice of Teaching in the Secondary School*, Chapter XXX.

<sup>20</sup> *Ibid.*, p. 593.

In his school work, he learns well and with moderate rapidity. He never asks for help except in places where some individual teaching is really necessary.<sup>21</sup>

The present emphasis upon translating test scores into grades which shall conform to the normal curve of distribution has gone much too far. On the one hand, it has resulted in a thoroughly mechanical procedure, and on the other, because of its much-heralded scientific nature, it has promoted the idea of reducing all tests, examinations, and other marks to a strictly objective form. The net result is that grades, as such, have been emphasized out of all proportion to their value and usefulness. Instead of representing the general trend of the development of the pupil, they become incentives to study on the part of the pupil, and absolute indices of success on the part of the teacher. Since in some school systems teacher promotions and demotions are in part at least based upon pupil progress in terms of results upon objective tests, the teacher struggles to make a satisfactory showing before the administrative and supervisory staff. Thus, graphs, test scores, and grades become the all-important element in the life of the teacher and pupil alike and, as a result, the intangible yet important learning products are neglected.

It must be admitted that scientific analysis and measurements have an important function. They serve as invaluable aids in diagnosing certain difficulties and in measuring the more tangible learning products. Without a doubt the normal curve of distribution may be utilized by the teacher to determine the significant trends in his grading, especially when considered over a long period of time. Then, too, grades have a legitimate function when made upon the basis of all available data and when accepted for what they are — personal judgments of trained individuals concerning pupil

<sup>21</sup> *Ibid.*, Chapter XXX, p. 597.

progress. The weaknesses of these instruments lie not in their inherent nature, but in their abuse.

In conclusion we would indorse a simple marking system, such as that advocated by Morrison, in which relatively few marks are given and these are symbolical of actual attainment of the formulated outcomes of the school. After discussing the difficulties of the ordinary marking system, Morrison states:

Nevertheless, it is perhaps necessary, and it is certainly convenient, to find some shorthand symbol which expresses the progress of the pupil's learning and reveals the major elements in his total adjustment to date. Now, as long as any such symbol is defined as standing for concrete evidence and the evidence is present in the case history to back the symbol, we are on a concrete footing. Our evidence may be poor and inferences may be bad, but we have at least come out of the world of stereotypes into the world of reality. . . . In our laboratory practice we have lately been using M, N, and R to stand for "mastery," "sustained interest," and "self-dependence," respectively. Thus MN signifies at once a pupil who reveals mastery plus interest in the course he is pursuing, MNR stands for mastery plus interest plus characteristic self-dependence. Other letters would have done as well, and we might go farther and add sundry designations to indicate various other acquired qualities. For instance we might add 1, 2, and 3 to stand for several levels of skill in courses in which the skill element appears, or we might add a performance test score for skill. For example MNRC80 in French I (see chapter XXV) would mean "Reading adaptation, plus evidenced interest and self-dependence, plus facility in reading as disclosed by a score of 80 on a given test."<sup>22</sup>

While, as Morrison points out, pupils may under his system still work for grades, yet if they represent a true

<sup>22</sup> *Ibid.*, p. 606. To those who are unfamiliar with Morrison's basic principles of learning, this system may not seem to differ materially from the ordinary grading system. That it is a radical departure from the traditional system will be understood when interpreted in terms of his conceptions of "mastery," "adaptations," and "skills."

learning product backed up by concrete evidence, this practice is probably "less pernicious than working for a performance grade." At any rate, it should be possible to minimize grades of this sort in the eyes of teachers, pupils, and parents, and thus focus attention upon the achievement of true learning products rather than upon mere symbols. The ideal situation would be a school where pupils found their incentives in their activities and where teacher and parent could note, by means of concrete evidence, the progress of the pupils. Since situations are not ideal, perhaps some system of grading and reporting is necessary. However, it should receive as little emphasis as is consistent with good pupil administration and accounting.

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## CHAPTER XVI

### RECORDING PUPIL PROGRESS

The principal function of pupil personnel records from the standpoint of both the teacher and the supervisor is to make available the data which are needed in order to provide, to the fullest possible extent, for the growth of the *whole child*. It is true that these records have other uses, such as the promotion of administrative efficiency through adequate statistical data dealing with attendance, per capita costs, and the like, yet these uses should be subordinated to the more important function of promoting pupil growth. It is, therefore, justifiable in a discussion of the supervisor's policy toward personnel records to center principally upon this important function.<sup>1</sup>

That there is much confusion among school officials as to the forms of the records and the data which are to be collected, as well as the uses which are to be made of them, is evident. A striking example of this confusion is given by Arch O. Heck, who examined the forms used by 131 of the leading cities of the United States. He reports:

Some of the forms are books, some are sheets, and some are cards. The register books are vastly different; some of them use

<sup>1</sup> This does not mean that other functions are not important but rather that, as purely administrative aspects, they are not particularly pertinent to our discussion. For a full treatment of all the various functions of records, as well as good discussions of theoretical and practical considerations involved in building a system of records, see:

Heck, Arch O., *Administration of Pupil Personnel*.

Moehlman, Arthur B., *Child Accounting*.

McAllister, A. J., and Otis, Arthur S., *Child Accounting Practice*.

*School Records and Reports*, Research Bulletin of the National Education Association, V (November, 1927).



a single line which may continue over five to ten pages for the entire record of one pupil; some use from eight to nine lines and have the attendance and scholarship record upon a single page. The Utah register uses an entire page for each pupil. It contains personal and family data concerning the child, his daily attendance record and his monthly scholarship record for the year. The sheet forms also vary; some contain data for several pupils; some are individual and contain a year's record; others are individual and cumulative for the elementary school period. The card forms have the same variability . . . .

. . . Even when registers contain the same general types of data, which they seldom do, the items included within these types vary greatly. By items are meant such specific data as name of pupil, address, name of father, and birth date. Items found on the same type of cards differ greatly. This variability is best realized by recalling that a recent study of the record forms of 131 cities in the United States showed 1515 different items; further, that 50.2 per cent of these items occurred only once among the host of forms examined. *Only 11.3 per cent. of these 1515 items occurred upon more than ten forms.*<sup>2</sup>

While Heck's study applies to both elementary- and secondary-school records, the situation in the secondary schools is probably no less chaotic. A recent Committee on Guidance in Secondary Schools<sup>3</sup> deplores the fact that "existing forms are inadequate, antiquated and unsatisfactory," and points out that "much of the uneasiness and anxiety in pupil accounting is justifiable, especially when one sees how little information the average school official possesses concerning the individual entrusted to him for a period of years for education and training."<sup>4</sup>

An examination of the leading systems of pupil accounting reveals a comparatively small amount of data which

<sup>2</sup> Heck, Arch O., *Administration of Pupil Personnel*, pp. 189-190 (italics not in original). Ginn and Company.

<sup>3</sup> *Guidance in Secondary Schools*, Bulletin of the National Association of Secondary School Principals, No. 19 (January, 1928), pp. 68-71.

<sup>4</sup> *Loc. cit.*

throw light upon the significant problems of growth and adjustment. They consist largely of conventional material dealing with (1) attendance, deportment, and scholarship,<sup>5</sup> (2) mental- and achievement-test scores, and (3) a record of physical examinations. These data are sometimes supplemented by miscellaneous items regarding such relatively insignificant matters as nationality of parents or guardian, race of pupil, occupation of parents or guardian, information concerning place and date of birth, time of entering school, promotions, and graduations.<sup>6</sup>

A number of complete systems of recording pupil progress have been developed. Some of these vary somewhat from the traditional types. A brief survey of this material will aid us in appraising the efforts which are being made to furnish a complete account of the significant phases of pupil growth.

The "cumulative record sheet" (for elementary schools) proposed by Heck, upon the basis of his study, provides for the following: (1) scholarship and attendance record by semester or years, (2) record of mental- and educational-test results, (3) "important facts concerning the physical welfare of the child," and (4) general information concerning the pupil, including essential facts regarding the home.<sup>7</sup> The record is to follow the pupil from grade to grade, or in case of transfer, from one school to another.

As a supplement to this sheet, Heck proposes that a "case study" sheet be provided for "problem cases." Upon

<sup>5</sup> The word "scholarship," as used in record systems, almost invariably refers to teachers' marks.

<sup>6</sup> See Heck, Arch O., *A Study of Child-Accounting Records*, Bureau of Educational Research Monograph No. 2, Ch. IX, Ohio State University Press, 1925, Table XV (pp. 122-124), for a list of the "ninety-eight items having the highest frequencies arranged from high to low." These include *all* the items which were found in an examination of the record systems of the leading cities of the United States that had frequencies of twenty-five or more.

<sup>7</sup> Heck, Arch O., *Administration of Pupil Personnel*, p. 226.

this form, which is the same size as the cumulative record sheets, is to be recorded in story form the case history of the individual which has an important bearing upon the "present troublesome situation." It should be noted that it applies only to problem pupils.

The record form developed by Arthur B. Mochlman, which is prescribed for use in the public schools of Michigan, provides for the following items: (1) personal and family history, (2) scholarship and attendance records, (3) standard test results, (4) vocational data, (5) physical examination record, and (6) character traits. This form is a cumulative record, designed to follow the student when he is transferred from one school to another. All data are entered on a large sheet which, when folded, forms a packet of convenient size for filing.<sup>8</sup>

John L. Stenquist, of the Baltimore Bureau of Educational Research, has devised a unique plan which is known as the *Baltimore Packet Record System*. According to the printed statement on the face of the packet, "it is designed to provide in a single unit a comprehensive, cumulative history of each pupil's school career." The data concerning the various phases of the pupil's growth are recorded on cards which are filed in a packet of suitable size. The following cards are now regularly provided for: (1) pupil's personal record, (2) medical examination record, (3) mental-test record, and (4) the reports of the social worker. The particular merits of the plan are its flexibility, which makes it possible to include "various reports becoming available from time to time," and the fact that in *one place* is to be found the record of the entire school history of the individual.

The McAllister-Otis System includes the usual basic items — attendance, scholarship, educational and mental tests, and health — and, in addition, provides for recording "the development of character which should result

<sup>8</sup> See Mochlman, Arthur B., *op. cit.*, Chs. II, III.

from proper learning."<sup>9</sup> This item is cared for by a composite score made by the principal, teachers, and others who are familiar with the work of the pupil, on a five-point scale covering the following traits: (1) honesty and truthfulness, (2) courage (moral and physical), (3) courtesy and generosity, (4) perseverance and industry, (5) obedience and loyalty, (6) leadership and initiative, (7) neatness and orderliness, (8) coöperation and friendship, (9) promptness and dependability, and (10) thrift and economy.

The National Association of Secondary School Principals<sup>10</sup> proposes a cumulative record system which is designed to supply the proper data for an adequate system of guidance. Since this program differs in important details, the following description of each form is quoted:

1. *Cumulative Scholarship Record.* The permanent scholarship record is the most important single form in the record system. It should contain the scholastic achievements of the pupil in the subjects taken during his secondary-school course. In systems where the junior and senior high-school organizations exist, the card should include census data, personal history, family history, placement data, interest, character appraisal, etc., in addition to scholarship and attendance records. Its purpose is to assemble as much essential data as possible on a permanent card for general use. The following sample has been prepared for use in regular four-year high schools; it may be used in the secondary schools having more or fewer than four years by changing the number of semester spaces.

2. *Cumulative Personal Record.* The cumulative personal record should contain the rating of traits, habits, characteristics, and activities. In importance this card is second to the permanent scholarship record form. Both cards are arranged so that records may be made by terms or semesters. The reverse side of the card provides space for test records.

<sup>9</sup> McAllister, A. J., and Otis, A. S., *op. cit.*, p. 3.

<sup>10</sup> *Op. cit.*, pp. 72-78. Samples of the described forms are reproduced in this section of the bulletin.

3. *Conference, Adjustment, and Placement Record.* Unless records are made of the information secured about pupils through interviews held with parents, teachers, attendance officers, and others who have come into intimate contacts with the individuals, valuable data are often lost. Memorandums should also be made after conferences with pupils in order that a record of the outcome or findings in the case may be accurately preserved.

If pupils leave school to accept positions, records should be made of the essential facts to assist the counselor in following up the case in giving advice regarding readjustments. The record card should provide space in which notes can be kept that will give the counselor a mental picture of the case.

4. *Health and Physical Record.* The health and physical record should show the history of illness and physical defects or impairments. It contains the history of the health conditions of the home. The card will give a graphic record of the pupil by terms or semesters, if the examiner is systematic in his work. The reverse side of the card provides for diagnostic and remedial notes and follow up. The diseases listed are those of general prevalence among children. The list should conform to local health conditions.

5. *Miscellaneous Forms.* There are many important forms in the organization and management of a school that are temporary in character. It is well to have such forms printed on small cards, three by five, or four by six inches. Because of the limitation of space, samples cannot be included. They may be secured from principals or counselors in any secondary school which has established a guidance department.<sup>11</sup>

The Ohio State Department of Education, under the direction of L. H. Munzenmeyer, Director of Child Accounting, has devised an elaborate "pupils' cumulative record"<sup>12</sup> in the form of an 8½ x 11-inch folder printed on both sides. It provides for the following items: (1) personal and family history, (2) aptitude and intelligence

<sup>11</sup> *Ibid.*, pp. 70-71.

<sup>12</sup> State Department of Education, Columbus, Ohio, Form 29.

data, (3) notable accomplishments in extra-curricular activities, (4) part-time and vacation employment record, (5) semester scholarship ratings in elementary grades (with column for noting special interest or aptitude of child), (6) trait rating for each elementary grade (courtesy, coöperation, judgment, leadership, personal appearance, reliability, resourcefulness, self-control), (7) semester scholarship ratings for the junior and senior high school, including ratings in "study habits" and citizenship ("which is a composite rating on traits"), and a special column for comments regarding "special ability, educational or vocational suggestions by home-room teacher, counselor or Director of Guidance," (8) health and disease record, and (9) supplementary data, in the form of case histories (to be placed in folder).

One of the most significant contributions to the field of child accounting has been made by William C. Reavis,<sup>13</sup> formerly principal of the University High School, School of Education, University of Chicago. He has applied the case method technique, which has proved so valuable in the field of medicine, the social sciences, psychiatry and psychology, to the problem of counseling and guiding high-school pupils. The following outline of case records used at the University High School, which are assembled not merely for so-called problem pupils but for *all* pupils, is indicative of the new approach to the problem of actually recognizing individual differences and utilizing these differences for the promotion of the growth of the individual.

1. Personal information card containing name, date of birth, name of parent, business of parent, home and business addresses and telephones, last school attended, and grade classification. Card filled by parent each year at the opening of school.

2. Health history of pupil containing record of childhood dis-

<sup>13</sup> *Pupil Adjustment in Junior and Senior High Schools*. D. C. Heath and Company.

eases, operations, illnesses, accidents, tendencies towards colds, nervousness, etc.

3. Preliminary mental and educational examination when the child is admitted to school. This examination consists of a battery of 22 tests. The results constitute the educational datum plane of the pupil.

4. Cumulative academic record in previous schools.

5. Weekly progress reports on unsatisfactory or exceptional work.

6. Mid-semester reports of unsatisfactory progress.

7. Birthday, medical examination of the pupil containing case record of physical examination, physical measurements, X-ray plate records of carpal bones, dental examination, and supplemental family history.

8. Semester reports containing academic rating and factual statement regarding the work of the semester.

9. Special reports on the character of work, application, and general attitude from all instructors on request of the principal.

10. Special reports on accidents or illness.

11. Commendatory reports for special services of a non-intellectual sort.

12. Memoranda of interviews with parents or pupils and file of correspondence.

13. Attendance record.

14. Unexcused absences.

15. Annual personnel rating on capacities, attitudes, and interests.

16. Report of students on participation in extra-curricular activities.

17. Annual rating on scholarship and citizenship for use in awarding prizes, and election of seniors to the honor society.

18. Cumulative scholastic record giving courses, ratings, and credits earned.<sup>14</sup>

<sup>14</sup> *Ibid.*, pp. 99-100. (Sample forms for these records are included in Appendix C., pp. 324-341.) See also Morrison, H. C., *The Practice of Teaching in the Secondary School*, Chs. XXX, XXXI.

An examination of this outline of case records indicates that, in addition to the conventional data dealing with personal history, scholastic attainment, health record, and mental- and achievement-test records, an attempt is made to secure case data of factual, descriptive sorts which will aid the supervisor or counselor in actually discovering the individual. In this way maladjustments may be detected, special abilities noted and provided for, and an accurate appraisal made of the pupil's progress toward the determined goals. For example, the "weekly reports of progress" for pupils who are exceptionally weak or strong in any field may serve either as a means of discovering special abilities or for detecting cases of incipient maladjustment. A case of the latter is reported by Reavis as follows:

B's work in Modern History has been unsatisfactory for the period of this report. He is careless and inaccurate in his notes, has been a cause of disturbance by his deportment, and frequently wastes time by failing to concentrate on the task in hand. Unless he improves quickly his maladjustment may become serious.

H is doing unsatisfactory work in Usage. He does not take the pains to write complete sentences, and he usually runs two or three into one. In the classroom he wastes much of his time and entertains an attitude of indifference toward his work. He is very careless. Unless he assumes a different attitude and is willing to shoulder responsibility for his written and oral expression he cannot gain credit for the course.<sup>15</sup>

This report is an eloquent illustration of the necessity for supplementing the conventional statistical data with factual material. In many high schools all that the record of such a pupil would show would be a final F, which would leave the supervisor or counselor entirely in the dark as to the cause of the maladjustment and, what is more important, would testify to the failure of the school to justify the confidence which the public places in it.

<sup>15</sup> *Pupil Adjustment in Junior and Senior High Schools*, p. 88.



The "semester appraisal" reports also afford significant clues as to progress which would be entirely lost in the ordinary system of pupil accounting. The following report on Pupil N in Literature I is a good example:

N is a very earnest student. In all her oral and written work she has evidenced genuine intellectual interest and superior results. Her written work has been relatively free from usage errors. She has submitted some very commendable supplementary projects done on her out-of-school time.<sup>16</sup>

The "qualitative rating of personal traits and abilities," instead of dealing with abstract traits, is concerned rather with concrete abilities which reveal pupil progress. Examples of these are as follows: "extent of intellectual interest," "teamwork qualities," "extent of intellectual independence," "ability to do original work," and "consideration for others."<sup>17</sup> This rating serves as a valuable supplement to other case data.<sup>18</sup>

A survey of the various systems<sup>19</sup> for recording pupil

<sup>16</sup> *Ibid.*, p. 97.

<sup>17</sup> For a complete list, see *ibid.*, p. 330.

<sup>18</sup> For an interesting discussion of the application of a plan of recording the complete development of the pupil to a progressive school, the reader is referred to the system developed by Eugene Randolph Smith and his associates, for use in the Park School, of Baltimore, Maryland. The distinctive feature of the plan is the unique manner in which a full account of the significant development of the pupil is provided for by means of the *Pupil Progress Record* in the "Lower School" and the *Pupil Analysis Card* in the "Upper School." For a complete description of the plan, see: Smith, Eugene Randolph, *Teachers' Manual of the Park School System of Pupil Analysis*.

<sup>19</sup> In this discussion of current systems, no attempt has been made to include some of the commercial systems which have been published for use in public schools. These, in general, do not differ from those discussed except as to the particular forms which they employ and the manner in which these forms are integrated in the complete system.

An excellent list of agencies distributing school record forms is given in the following book: Weber, Oscar F., *Problems in Public School Administration*, pp. 323-325.

progress reveals three characteristic points of view regarding *significant* data for promoting pupil growth. These will be discussed briefly.

First, there is the point of view which assumes that the statistical data included in the ordinary attendance and scholastic records (teachers' marks, credits, and the like), records of mental and achievement tests, facts concerning personal and family history, and the reports of physical examinations are all that are required for the proper guidance of the "normal" child. If a child becomes so seriously maladjusted as to be classified as a problem case, then the record should be supplemented, but as long as the child gets into no serious difficulties, all significant data are included in the above classifications.<sup>20</sup>

Very little argument is needed to show the inadequacy of this point of view. Until our marking system is developed in accordance with dynamic changes in individual behavior in the direction of formulated outcomes, rather than in terms of information acquired, the scholarship record that is made up entirely of "marks" is bound to give slight indication of genuine pupil progress, or of maladjustment. Even in Morrison's plan, where the marks more nearly indicate the extent to which the learning products have been acquired, supplementary data in the form of semester appraisals are necessary for the purpose of guidance. The same inadequacy appears in the conventional intelligence- and achievement-test data. The intelligence-test score does reveal the present development of the pupil in the acquisition of information and skills included in the test. From the lack of performance may be *inferred* arrested development due to any number of

<sup>20</sup> For an able discussion of a system of records of the "objective" type, which is designed to serve as the basis for educational guidance as well as for college entrance, see: Wood, Ben D., Proceedings, Ohio State Educational Conference, Tenth Annual Session, Ohio State University Bulletin, XXXV (September 15, 1930), pp. 191-194; 252-259.

causes, some of which may be remediable. Carefully gathered case data are needed to follow up the situation before final diagnosis is safe. The scores on achievement tests indicate a comparison of the individual with the wider group, but as has been pointed out previously, this comparison is based very largely upon the acquisition of facts and skills, rather than upon the more significant learning products. Even the conventional medical examination may be inadequate, especially in those cases involving a consideration of mental hygiene. In these cases, the conventional physical and psychological data must also be supplemented by careful case studies.

We are thus forced to the conclusion that, if we really desire to recognize individual differences in pupils and to make adequate provisions for them, such provisions must be reflected in our system of pupil accounting, which, in the last analysis, must be the basis for counseling and directing the student.

The second point of view, which is implicit in some of the systems of pupil accounting, is that the inadequacy of the usual statistical data may be cured by *more statistics*. Witness the addition of "character" scales and ratings in the form of trait profiles which have found their way into child-accounting systems. Character is assumed to be something apart from the physical and intellectual behavior of the pupil, which may be reduced to points on a scale. Obviously, such ratings, in addition to all the other problems which they raise,<sup>21</sup> have the same inadequacy which was pointed out in our previous discussion. To know that a boy is rated 3 on a five-point scale, on the trait of "personality and appearance," gives no clue as to what the real difficulties are, or as to the potentialities for growth which the boy possesses. Far more significant would be a matter-of-fact statement from those who know him best, as to

<sup>21</sup> See Chapters III, VIII, IX.

specific illustrations of conduct which make for or against the integration of personality.

The third point of view, and the one to which the authors subscribe, recognizes clearly the inadequacy of present statistical data and the need for supplementation by accurate descriptive case studies. It refuses to sacrifice important material to economy of filing space. In insisting upon full information as the basis for stimulating growth, it is in fact more "scientific" than the point of view which deliberately rules out everything which cannot be expressed in terms of mathematical symbols. In other words, it recognizes that all information which contributes to the solution of pupil problems is significant and worthy of inclusion in the individual record of the pupil, even though it may interfere with the precise and systematic classification which appears to be the very heart of many systems of accounting. If those who are in charge of our schools really believe that the vast amount of data which have been accumulated on the subject of individual differences requires that pupils be treated as *individuals*, the system of recording pupil progress must be so modified as to make possible the *discovery* of the individual, instead of only classifying him.

If this point of view is adopted by the supervisor, then the records of pupil progress, instead of being cold statistical documents to be filed away and used only in case the pupil gets into trouble, is dropped, promoted, or transferred, become living, dynamic stories of the individual's intellectual and emotional life. These records, which will reflect in a significant manner his progress toward the final goals, should give point and direction to the educative process. For example, a record of the type proposed would have little difficulty in answering such significant questions as the following:

1. Is the individual growing in social outlook? That is, does he show an increasing ability and disposition to

formulate and use a social philosophy of life in his contacts with his fellows both in and out of the classroom?

2. Does the conduct of the individual indicate an increasing ability and disposition to apply the technique of reflective thinking to the solution of personal and social problems?

3. Is the individual growing in the development of sustained intellectual and æsthetic interests?

4. Does the conduct of the individual reveal an increasing control over the problems of practical living, such as health, physical fitness, and vocation?

Our next chapter will show the contributions which mental hygiene has made to the problems of pupil growth, and will indicate further the type of data which are needed if the *whole child* is to be included in the system of accounting.

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## CHAPTER XVII

### MENTAL HYGIENE AND PROBLEM PUPILS

Man's emotional nature has long been in somewhat the position of a poor relation. What to do with it has always troubled him. Philosophies of life turn upon answers to problems regarding the free expression of the emotions or the determination to extinguish them completely in order that one might dwell in a state of Nirvana.

There is a difference between asking what may be done about a thing and defining its nature. This may account in part for the fact that while philosophers and students of human behavior have for centuries pondered over the place of the emotions in human conduct, it is only in modern times that genuine advances have been made in understanding the character of their intimate relation to other aspects of our being.

Traditionally the emotions and reason are conceived to belong to separate compartments of man's being and are by nature in conflict. The emotions are said to lure us toward the world, the flesh, and the devil; the pale light of reason alone casts its flickering rays along the straight and narrow path which leads to Heaven. By and large, philosophers and educators have confidence that reason or intelligence, when properly trained, can win and maintain control over the emotions. Thus, John Locke opens his *Conduct of the Understanding* with the words:

The last resort a man has recourse to, in the conduct of himself, is his understanding; for though we distinguish the faculties of the mind, and give the supreme command to the will, as to an agent, yet the truth is, the man, who is the agent, determines himself to

this or that voluntary action, upon some precedent knowledge, or appearance of knowledge in the understanding.<sup>1</sup>

Spinoza was probably one of the first students of human nature to recognize an intimate relationship between the mind and the emotions. For him the emotions and the intellect differed only in degree, not in kind. An emotion, in his terminology, was a confused or an inadequate idea. Accordingly he sought to understand the operations of the emotions in order to discover ways in which they might be transformed into adequate ideas. The way of freedom, he points out in his *Ethics*, is achieved exclusively by the philosopher, who succeeds in identifying intellect and emotion through a complete intellectual and emotional understanding and acceptance of the external and necessary operations of God. An individual of this character is a wise man, and ". . . in so far as he is regarded as such, is scarcely at all disturbed in spirit, but being conscious of himself, and of God, and of things, by a certain eternal necessity, never ceases to be, but always possesses true acquiescence of his spirits."

Spinoza, of course, did not delude himself into believing that all men could attain to this state of philosophic calm and understanding. He concludes his *Ethics* with the remark:

If the way which I pointed out as leading to this result seems exceedingly hard, it may nevertheless be discovered. Needs must it be hard, since it is so seldom found. How could it be possible, if salvation were ready to our hand, and could without great labor be found, that it should be by almost all men neglected? But all things excellent are as difficult as they are rare.

Despite the recognized importance of the emotions and the difficulty involved in their education, the traditional

<sup>1</sup> *Locke's Philosophical Works*. Bohn Edition. London: George Ball & Sons, Vol. I, p. 24.



school has pursued an ostrich-like policy with reference to them. It has been primarily an intellectual institution and has concentrated upon things of the mind. In recent years, however, the purposes of secondary education have broadened to include a concern for factors of growth previously ignored or consciously referred to other agencies. The grudgingly admitted function of the secondary school as essentially that of preparing boys and girls for intelligent participation in democratic living, forces attention to factors in growth more inclusive than those purely and merely intellectual. A first step in the recognition of a wider responsibility in education involved a concern for physical and health education. Then came an increasing stress upon the significance of social and extra-curricular activities. Today the creative arts are finding their place in the sun because of their value in developing integrated personalities.<sup>2</sup> In short, it is coming to be recognized that the individual develops as a whole, that intellect, feeling, emotion are *aspects* of behavior rather than geographical areas of a human personality.

Educators are largely indebted to social workers and to psychologists with a psychiatric approach for evidence of the bearing of emotional factors upon intellectual growth. Visiting teachers and child-guidance clinics have in the past few years supplied unmistakable evidence that school procedure requires modification and teachers require new insights into the character of boys and girls. They have accumulated evidence of case after case where intellect seems to be present but is not functioning normally. Thus, Jeannette Regensburg, writing as a psychologist for the Bureau of Children's Guidance in New York City, can state that 15 per cent of the cases referred to the Bureau in the course of a four-and-a-half-year period fall within the supernormal group; that with eight exceptions "they

<sup>2</sup>Cf. Rugg and Shumaker, *The Child-Centered School*, Chs. XII, XIII, XIV.

have been referred as manifesting undesirable behavior symptoms, but, in addition, thirty, or one-third of the group, are reported as failing in one or more school subjects, some in all of their class work."<sup>3</sup>

No one has described better than Dr. Frankwood E. Williams the intimate influence of emotional factors upon the use of the intellect. In an address to social workers and teachers he states:

May I put the matter in a little different way? We are a group of intellectually trained men and women, and each of us has been more or less successful in the practical application of our training. We are a group of comparatively stable individuals. None, and least of all do we ourselves, consider that there is anything mentally wrong with us. And yet there is not one of us but has his psychic scars. There is probably not one of us but would like to be more efficient, more forceful; would like to see his problems more clearly; to make his work more sharp-cut and direct; to keep to his plan with less distraction; to maintain a better perspective; to gain a closer coöperation with others; to be more successful in presenting his point of view to colleagues; to win greater confidence; to have a larger faith in his own integrity. All sorts of reasons we assign for our failures and mostly they are intellectual. When it comes down to it, we simply have not the brains. It does not seem to occur to us that we may not have the full use of the brains we have. I question if it is the quantity or the quality of our intellects that hinders us. I am inclined to think it is our emotions we stumble over, our prejudices, our antagonisms, our strong likes and dislikes that pitch us into judgments that we must later find reasons for defending; our habits of thought and stereotyped methods of reacting; our undercurrent of cynicism perhaps (in spite of the fact that we thoroughly dislike cynicism); or our too constant and ill-founded optimism, or our false pessimism (false, because we do not intend to be pessimistic, and yet we seem to react pessimistically before we know it); our too great placidity, perhaps; or our touchy irritability; our surprising intolerance

<sup>3</sup> "Emotional Handicaps to Intellectual Achievement in Supernormal Children," *Mental Hygiene*, X (July, 1926), p. 481.

when we pride ourselves on breadth of view; our astonishing lack of generosity when we wish to be generous; our disconcerting tendency toward disingenuousness when we wish to be frank; the little intellectual dishonesties we slip into almost unaware when we believe such things beneath contempt. Herein lie our defeats, our unhappinesses, and our inefficacies.<sup>4</sup>

If we grant, with Dr. Williams, the important part the emotions play not only in our individual intellectual development but also in the ordering of our lives in connection with our associates, it is important for teachers in their relations with pupils and for supervisors in their contacts with teachers not merely to acquaint themselves with these emotional responses but also to acquire a sensitiveness of adjustment with reference to their existence. Merely as an introduction to further study along these lines, we shall describe in this chapter certain typical cases of emotional maladjustment with some indication of their bearing upon progress in school.

Before introducing this material, however, we must pause to enter a caveat with respect to the terminology we shall use. The reader will observe in the cases described below that a rather sharp line is drawn between intellect and emotion. Indeed a perusal of much of the literature in this field will convince us that psychiatrists tend in their diagnosis to isolate intellect and emotion and in their treatment to bring about conditions designed to integrate these two functions of our nature. In other words, they reintroduce a faculty psychology that has long since been discarded and has no present basis in fact. We mention this here in order to avoid confusion and to make clear that the authors do not subscribe to this point of view. Traits, intellectual and emotional, are not self-contained

<sup>4</sup> "The Need for Emotional Control through Education," *Educational Review*, LXV (January, 1923), pp. 43-44.

See: Williams, Frankwood E., *Adolescence*.

entities. They are relative to circumstances biological and environmental. The personality, as the organism, is fundamentally an integrating and organic whole.

It is possible, however, to differ with the premises which the mental hygienist adopts when explaining his data, and at the same time to accept as invaluable his observations regarding the intimate interplay and interrelationship of the intellectual and the emotional. Indeed we believe that a conception of education as a process in which the individual grows through a progressive reorganization of his experiences can profit more from this focussing of attention upon factors in growth hitherto neglected in educational practice than can a Humpty Dumpty psychology that breaks the organic wholeness of the personality into fragments.

In his essay on *Compensation*, Ralph Waldo Emerson puts forth the doctrine of polarity in nature. Action and reaction, he states,

. . . we meet in every part of nature; in darkness and light; in heat and cold; in the ebb and flow of waters; in male and female; in the inspiration and expiration of plants and animals; in the equation of quantity and quality in the fluids of the animal body; in the systole and diastole of the heart; in the undulations of fluids, and of sound; in the centrifugal and centripetal gravity; in electricity, galvanism, and chemical affinity.

This polarity, which Emerson thought fundamental in physical nature, he likewise read into the nature and condition of man. "Every success," he writes, "causes a defeat; every defect, an excess. Nature hates monopolies and exceptions. The waves of the sea do not more speedily seek a level from their loftiest tossing, than the varieties of conditions tend to equalize themselves."

The mental hygienist takes this term, "compensation," and uses it to characterize deviations from normal reactions to life situations. For example, all of us at one time

or another compensate in *imagination* for our defeats. Just as the child of three or four who is chased home by older boys derives satisfaction in relating to a sympathetic listener the evils he will inflict upon his enemies, so we all commonly win in imagination the victories we have lost in reality. And, on the whole, it is normal and healthy that we should do so. A victory won in idea today may lead to victory in reality tomorrow. Occasionally, however, both children and adults derive so much satisfaction out of their imaginary accomplishments that they form habits of energetic activity in daydreams only, which thereupon substitute for dealing at first hand with reality. When this occurs, they become phantasy cases.

It is not uncommon for the "intellects" of children of this type to progress and register satisfactorily on a test scale while the emotions remain infantile.

The child thinks that he tries, but in reality he is drifting on a cloud of feelings and daydreams, quite incapable of experiencing the joy of actual thought. M. R. was such a case. 10 year I.Q. 124; 11 year I.Q. 121; 12 year I.Q. 126; 13 year I.Q. 134. In school she was regarded as delicate, sweet, painstaking, but unable to cope with her work. When she said that a lesson was too long or too hard her teachers believed her without question. Year after year from the primary grades she made each promotion with heavy conditions, spent many hours of summer study and dragged on again. M. R. came from a home of culture and sensible supervision. Her mother's attitude in regard to the difficulty of the work concurred with that of her teachers, but she finally became convinced that the girl, then about 13, was not exerting herself as much as we had supposed. True, she never neglected her lessons for pleasure, but many hours apparently devoted to her books were in reality given over to dreaming. It was the same in regard to dressing and bathing, and we all agreed that it was almost beyond credence for a child to have listened to conversation in a home like hers and show herself so lamentably ignorant of everyday information.

The psychiatrist regarded as of great significance facts either not known to her parents or teachers or looked upon as trivial. He found her whole sensory life to be passive. She floated on physical sensations induced by her own thought. . . . He said that her phantasies were merely vehicles of sensation. In the first place medicine and a richer vitamin diet were prescribed in order to enlarge the instrumental drive. The second step was dancing. It was believed that by means of rhythm a sensory life might be acquired by muscle, by posture, by activity, rather than as heretofore by mere passivity. Objectivation was further sought through the instrumentality of a toy theater.

M. R. was faithful in following directions, though for some time no change was noted. Gradually, however, she became more active and alert and realized the end to be attained. Then it was possible for the psychiatrist to state an intermediate problem for her. He told us that until the primary problems of sensation, activity, etc., were solved she had no chance to solve the higher problems of symbolic situations with words, the purely conceptual problems of her school work. Weeks passed and then rather suddenly we realized that these were being solved, that her lessons were being mastered in reasonable time by an eager, wide-awake little girl, in short that the cure was largely accomplished.<sup>5</sup>

Morgan, in his book *The Psychology of the Unadjusted School Child*,<sup>6</sup> describes the transition that frequently takes place in abnormal cases, from daydreams to advanced forms of phantasy and finally to a complete escape from reality, such as occurs in the loss of personal identity. As he points out, daydreaming becomes a serious matter when it serves as an escape from reality. An individual may fail to cope satisfactorily with a concrete situation but, instead of seeking a way which actually improves matters, he consumes the time he might thus utilize in the winning of an imaginary victory. This insures a second defeat

<sup>5</sup> Gillingham, Anna, "Educating the Gifted Child," *American Review*, Vol. I, pp. 406-407.

<sup>6</sup> Chs. VII, VIII.

with its added inducement to withdraw from the cruel realities of the world.

An acquaintance with the character of this mechanism on the part of English teachers should render it possible for them frequently to assist pupils in the early stages of academic and social maladjustment. Frequently a pupil "writes well" and is the pride of his composition teacher while at the same time the despair of teachers in other subjects. An understanding reader of this child's compositions might use the materials of themes as occasions for penetrating to the genuine concerns of his life and perhaps for helping him toward a better self-understanding and a constructive meeting of his problems.

A second type of compensatory behavior expresses itself in action. In these cases individuals resort to self-assertive action and even aggressiveness in order to conceal fear, timidity, or a haunting sense of failure. Just as the small boy, whose fond mother insists that he come forward to greet her guests, frequently shocks both mother and visitors by a bold and rude remark, so the victim of an inferiority complex will cover up his sense of failure by denying in action his most valued concerns.

An excellent illustration of compensation in action is that of a colored boy who entered a northern school from a segregated southern school. This boy, A. M., had an I. Q. of 14.

At first he was quite impossible in behavior, sullen under restraint, noisy and disorderly, apparently quite impervious to ideas of obedience. It required a long time to win his friendliness through a policy of reward and appreciation, rather than that of punishment. For a brief time he became quite amiable. Then we took the next step towards securing intellectual progress. Here we were blocked. A. M. absolutely would not study. He insisted that the lessons were too easy, that he knew them without study, that he wanted to go into the next grade. Yet his work was a complete

failure in all except memory and formal processes in which he had been "rapid advanced." When pressure was exerted, sullenness returned. He was finally suspended for two weeks to work himself back by strenuous effort and to give everybody involved a chance to study the case.

A. M. is the only child of very highly educated leaders of the Negro race. They are intensely ambitious for him to make good for reasons of racial as well as those of personal affection. From his infancy he has had exhortations and appeals on a very high level. His parents' passionate devotion to their child has expressed itself in a stern resolve to hold him to the very highest. He was always ungovernable, resentful of authority and argumentative.

We learned that with all his bravado he was the victim of constant fear. He was afraid of other children and could be "beaten up" by street gangs without daring to resist. He always saw the "can't" as an appalling demon in his pathway, interfering even with his play.

When his mother began to teach him during his suspension, she discovered that despite his swagger about the easy lessons, the underlying reason for his refusal to study was his deep, sickening fear that he would not be able to handle the material in the analytical manner required. Her first task was to prove to him day by day that he could master the assignment. The psychiatrist found the boy laboring under a physiological inferiority which would readily account for the psychic compensations. There was a long history of tonsillar infection with evidence of effect on endocrinal growth and the X-ray revealed infantile teeth and bony structure.

The personality inferiority symptoms were very plain, taking the form of a protest in behavior that he was not weak, but strong, not to be controlled but to control. This explained the sullenness under punishment. His parents' exhortations to perfection and to become a leader of his people fitted in with a similar sense of helplessness under a heavy burden. A diet richer in vitamins was prescribed. The parents were urged to do everything in their power to develop physical prowess and to afford opportunities for its application, at the same time relaxing the emphasis on future



example and responsibility. We were all shown how much of his energy was drained off by his compensation demands. We were urged to give him tasks which were not subjective — in which he could obtain objective success. At home and at school we made a special point of helping him to do whatever thing he felt he could not do. The improvement in the boy was almost like an altered personality.<sup>7</sup>

The school fails occasionally in its excess enthusiasm for academic accomplishments and the pressure that teachers feel they are under to prod and push pupils so that they will come up to high academic expectations. In consequence, teachers are predisposed to offer up thanksgiving when they secure a pupil who progresses on his own initiative, and is docile and unobtrusive. And yet, the mental hygienist warns us that academic success is not always healthy in itself. A boy or girl who fails to make good in his social adjustments may very well compensate by undue concentration upon his books. As Jeannette Regensburg points out:

There are times when the child as a protective measure, himself over-emphasizes the intellectual, a reaction often accompanied by withdrawal from social contacts because of a feeling of inadequacy and insecurity. The youngster who reads, reads, reads, is protecting himself from inability to meet his fellows on common ground, perhaps because of his own physical inferiority, if he is a supernormal child unwisely accelerated or physically underdeveloped. Sometimes, in a kindly misguided desire to offer him intellectual stimulation, a gifted child is placed in a school attended by children who will not accept him socially. Then his inability to cope with the social situation in school results in unhappiness and classroom failure, as his efforts to protect himself or compensate for his deprivations require a disproportionate amount of time and energy. There are many kinds of competition which these children enter upon in a miserable effort to gain substitute satisfactions.<sup>8</sup>

<sup>7</sup> Gillingham, Anna, *op. cit.*, pp. 406-407.

<sup>8</sup> Regensburg, J., "Emotional Handicaps to Intellectual Achievement in Supernormal Children," *Mental Hygiene*, X (July, 1926), pp. 487-488.

More serious, says Morgan,<sup>9</sup> than the types of reaction thus far described is the admission of failure, a conscious acceptance of inferiority. It is for this reason that parents and teachers who constantly remind children of their failure, or who confess a lack of faith in them, may do irreparable harm. We are not contending that a boy or a girl or an adult should not know of his limitations. On the contrary, an honest facing of facts is a first essential for healthy growth. But it is one thing to know one's limitations and another to become obsessed with a consciousness of them. It is one thing to understand what we cannot do and it is another to have our self-respect undermined. It is for this reason that Burnham<sup>10</sup> insists that, just as it is the business of the social worker "to give concrete tasks to those who are chronic failures" and thus encourage them to further activity through the stimulus of success, and the physician to give his patients an opportunity to do something for themselves or others that will benefit health, so it is the teacher's business "to see that every child at some time, in some way, in some subject, achieves a marked success, and that sometimes they get an honest gauge of themselves by failure."

Not infrequently a child who senses failure at one point, or who suffers from a physical defect that marks him as different from or inferior to other children, will transfer this consciousness of difference or inferiority to a lack of confidence in general.

This form of retreat is illustrated in another case cited by Anna Gillingham:

J. B.'s I.Q. was 116 when he was ten years old, 121 when he was eleven, 136 when he was twelve, and 132 by the percentile rank method when he was sixteen and in the upper high school. J. B. was a bright, merry little fellow of nine when a terrible accident

<sup>9</sup> Morgan, J. J. B., *op. cit.*, p. 53.

<sup>10</sup> Burnham, W., *The Normal Mind*, p. 479.

left him permanently and conspicuously maimed and incapacitated for boyish sports. As a little boy his language work was less good than his mathematics and there was a very slight, rather attractive lisp in his speech. As the yearly examinations progressed, vocabulary and other verbal tests tended to lag behind, though not to fall below the mental level. But as full realization of his physical handicap dawned upon the growing boy, he shrank more and more within himself, till it became almost impossible to get whole sentences out of him: all through high school, he fell back upon his courteous manner and bright smile, seldom voicing a rounded sentence, although there was no real speech defect. The tests yielded good results in reasoning, memory, mental representation and so forth, but he never regained spring, zest, joy in life. He explained that he was working hard and that the teachers did not blame him, but he "just lacked ability." Perhaps I was able to show him that he was allowing a physical defect to assume undue domination of his life, even to the extent of an apparent mental incapacity quite contrary to fact. We all desire normally to be like our fellows, but his grief over the thwarted herd-instinct had extended his unavoidable physical deviation into an unnecessary mental and behavior deviation. There was a decided awakening and happier outlook, but it required all the skill at the command of the school to lift the sense of mental inferiority which had spread from his physical inferiority.<sup>11</sup>

A mechanism similar in many ways to compensation but which perhaps merits a separate classification is that of transference. Like all mechanisms, this varies from the relatively non-serious shifting of responsibility or perhaps unconscious self-deceptions of which all of us are guilty to pathological evasions of reality.

H. Creighton Miller describes<sup>12</sup> the case of a woman who went to him for consultation in 1915 because she suffered from an irrational anxiety about her children. She recognized that the children were healthy and normal, in

<sup>11</sup> *Op. cit.*, pp. 403-404.

<sup>12</sup> *The New Psychology and the Teacher*, pp. 155-156.

no immediate danger and that her concern for their safety was unreasonable, but she could not avoid hedging them in with elaborate precautions and restrictions. Miller elicited the information that the woman's husband was a colonel in a front-line regiment, but that she was not anxious regarding his safety, because "she had a presentiment that he would come back all right." Ten days later word came that the husband was killed and the irrational anxiety regarding her children at once disappeared. Miller states that her previous inability to face the possibility of her husband's death had caused her "to thrust this out of consciousness," and to make the false adjustment on the basis of the presentiment that he would come back without harm; while she transferred her real anxiety for her husband's safety to the activities of her children.

Miller's patient transferred the emotion of anxiety from one object to others. The school child not infrequently transfers his resentment against the harsh and intolerant exercise of authority he experiences in the home to the school, or vice versa, the dislike for a teacher to the subject taught by that teacher.

An interesting case of this character is described by Jeannette Regensburg. It is that of a girl in the senior high school who was reported as failing in Latin and "slumping generally in all her marks."

Her Latin teacher reported: "She is an average student, nothing exceptional. She is serious, earnest, a hard worker, probably doing about the best she can. In class, though she is attentive, she is passive, not alert, probably because her response is slow, not that she is dull. As she develops, I believe she will improve as a student, but will never be brilliant." This seemed to throw light on the problem until examination revealed an intelligence quotient of 120. Evidently, then, Sarah was not doing the best she could. The next step was to inquire into the social relationships of this girl in an effort to find the factors underlying the school failure, which

was only one of the symptoms for which she was referred to the clinic.

Among the essential facts for this aspect of her problem we find the presence of a mother of considerable intelligence whose life has been a series of thwarted ambitions in the educational field. Her desire had been to enter upon a professional career, and with that still in mind, she attends college evening courses while the girl views her efforts with contempt. The mother, we find, has continually nagged this daughter about her school work, urging her to prepare for college and supervising her methods of study with exasperating attention to detail, while the girl ardently desires to make music her main study, but is unable to dominate the situation. What happened is of tremendous interest to the psychiatrist. The mother has always been a splendid Latin scholar, and we find this capable girl failing in that very subject, identifying it with her mother, who is thwarting the child's natural desires and who, as an added insult, lavishes her affection only upon the younger sister. We find further identification in the girl's spontaneous expression of dislike for the history teacher. The connection here lies in the fact that the mother, worried over her daughter's failing marks, had a particularly long conversation with Sarah's history teacher. As the girl herself put it, "I feel so uneasy when she (the history teacher) is around. She and my mother talk about me and now she knows what my mother thinks and I guess she thinks the same." In other words, the history teacher now also becomes the mother, whose attitude toward her, the child feels, is unsympathetic and unfair. Sarah was quite sure she could make good marks in history if she had another teacher. Instead of allowing such a change, the psychiatrist, of course, took up the matter of identifications as a mental-hygiene issue; a couple of weeks later Sarah's mark in a history test was 86 and her opinion was changed to read, "I don't know but what I like that teacher some after all." Furthermore, the patient gives full vent to her feelings about bright people in general, a protective device against all who, like her clever, though non-understanding mother, may cause her discomfort and insecurity.<sup>13</sup>

<sup>13</sup> *Op. cit.*, pp. 492-493.

It is not the pupil alone, however, who transfers his emotional reactions from one object to another. Teachers are also human and their ambitions are frequently thwarted. They are sensitive to the atmosphere in which they live and work and this they reflect in their judgments and their actions. Take, for example, the matter of liking and disliking people "instinctively." An explanation for many of these attitudes undoubtedly lies in our past. We may have forgotten the specific instances or the particular individual responsible for building into us these "leanings," but we continue to carry them over into our relations with our colleagues and, if we are teachers, with our pupils. Careful self-observation on the part of supervisors and teachers will reveal to them that their appraisal of the personal qualities in the one case of teachers and in the other of pupils will turn at times upon prejudices derived from experiences in the past, the source of which they have forgotten and whose significance they have hitherto overlooked.

Dr. Frankwood E. Williams, in a paper on "The Mechanism of Human Behavior," illustrates the significant part a trivial characteristic such as "Titian" hair may play in the winning or losing of a position.<sup>14</sup> He cites as an illustration the employer who may attribute "personality" to the individual possessed of this characteristic or of qualities that have a decided appeal to him but the genesis of whose influence traces back to old emotional situations long since forgotten.

In our discussion of teacher-rating scales we argued that traits commonly ascribed to people are more accurately viewed as joint products of the individual and forces operating upon him. We also suggested that qualities, such as loyalty and coöperation, are resultants of two variables,

<sup>14</sup> Williams, F. E., and others, *Social Aspects of Mental Hygiene*. New Haven: Yale University Press, 1925, pp. 22-23.

the teacher and his surroundings, *including the supervisor*. The phenomenon of transference bears upon this same point. One might well argue that supervisors should strive to provide congenial working conditions for their teachers if for no other reason than to protect pupils from the unhealthy emotional responses of teachers whose needs and desires and aspirations are frustrated or balked or unwisely dealt with by supervisors. Dr. Bernard Glueck, in an admirable paper on "Some Extra-Curricular Problems of the Classroom," shrewdly remarks in this connection:

The fatigue engendered from having to manage too large classes, the ennui which is inescapable when one is so largely deprived of the opportunity to exercise one's initiative, the irritations that are bound to come from consistent lack of appreciation of one's best efforts in connection with an administrative machinery which has become so largely impersonal in nature, the anxieties over security of tenure, all these are effects which only the exceptional teacher is able to escape. The average man and woman obliged to work under these circumstances comes to reflect in his own personality and attitude the characteristics of the dissatisfied and balked individual, characteristics which in the specially sensitive person are sufficient to poison the atmosphere of any classroom. It is particularly under these conditions that the teacher is apt to resort, consciously or otherwise, to a kind of exploitation of his or her authoritative position which plays havoc with the personalities of the children. No attempt to estimate accurately the effects upon child life of classroom procedure is apt to be dependable unless it takes into account the important question of the teacher's personal adjustment to her position and task as a teacher. Apart from the fact that the teacher is likely to inject into the atmosphere of the classroom feelings and attitudes which relate to personal issues that have nothing to do with the business of teaching, the specific conditions under which she is obliged to work determine her relation to her pupils.<sup>15</sup>

<sup>15</sup> Publication No. 3, Joint Committee on Methods of Preventing Delinquency, p. 4. Commonwealth Fund Division of Publications.

Supervisors and teachers would also do well to keep in mind, as Dr. Glueck emphasizes,

. . . that classroom scrutiny is not a one-sided affair, and that as far as the personality of the child is concerned their behavior as human beings in attitude, gesture, tone of voice, emotional display and, above all, honesty in dealing with the pupil, is of much deeper significance than is their performance as educators. Moreover, it deserves constant reiteration that the effect of the personality and behavior of the teacher upon the child is apt to color the child's attitude toward life in general, since so much of his knowledge comes to him by way of the teacher's interpretation of it.<sup>10</sup>

We have already suggested that the mechanisms discussed are not clean-cut classifications. It is easier in logic than in life to classify so that lines of demarcation do not overlap. Living behavior may illustrate at one and the same time one or more types. Thus, in Dr. Williams' illustration of the preference of a "Titian"-haired girl over a girl who objectively considered has a better record, we have a case which illustrates *transference* and also rationalization. The arguments, in other words, which the employer uses to indicate that the "Titian"-haired girl excels in personality are not the real grounds for his preference. Rationalization thus differs from reasoning. In valid reasoning all the data relevant to a conclusion are in evidence. The conclusion follows from premises of which the thinker is conscious, and to which he has given adequate consideration. There is no conscious emotional reaction hiding in the background, secretly pushing to the fore its favorite contestant for the position of conclusion. On the other hand, we rationalize when we suppress the true cause for our decision, and invent plausible reasons for following our wishes, when we disguise our impelling motives and present respectable vouchers for our actions.

<sup>10</sup> Publication No. 3, Joint Committee on Methods of Preventing Delinquency, pp. 5, 6.



There need be no conscious dishonesty in rationalization. We may deceive ourselves as well as others quite innocently. We are all of us a plurality of selves, and it is not uncommon for us to strive for the respect and the approval of our best self while yielding to the urgings of a more questionable self.

The mechanism of rationalization is by no means a discovery of contemporary psychology. John Locke, frequently designated as the founder of modern psychology, not only recognized its existence but also indicated clearly how one might detect its presence in his own thinking. "Everyone," he says, "declares against blindness, and yet who almost is not fond of that which dims his sight, and keeps the clear light out of his mind, which should lead him into truth and knowledge?" He adds in his quaint language that those who are willing "to get rid of this great hindrance to knowledge" and would "shake off this great and dangerous impostor . . . who dresses up falsehood in the likeness of truth" may succeed by applying to themselves a simple test.

He that is strongly of any opinion must suppose (unless he be self-condemned) that his persuasion is built upon good grounds, and that his assent is no greater than what the evidence of the truth he holds forces him to, and that they are arguments, and not inclination or fancy, that make him so confident and positive in his tenets. Now if, after all his profession, he cannot bear any opposition to his opinion, if he cannot so much as give a patient hearing, much less examine and weight the arguments on the other side, does he not plainly confess it is prejudice governs him? And it is not the evidence of truth, but some lazy anticipation, some beloved presumption that he desires to rest undisturbed in. For if what he holds be, as he gives out, well fenced with evidence, and he sees it to be true, what need he fear to put it to the truth? If his opinion be settled upon a firm foundation, if the arguments that support it and have obtained his assent be clear, good and con-

vincing, why should he be shy to have it tried whether they be proof or not?<sup>17</sup>

The reactions of a student toward events in the classroom or the criticisms of an instructor will frequently reveal the operation of this mechanism. For example, Morgan relates<sup>18</sup> an incident in which a graduate student submitted the first half of his thesis to his major professor with the request that the professor be perfectly frank in his criticisms. The professor, taking the student at his word, pointed out that the thesis lacked organization and unity. This criticism hurt the student's pride, and instead of going over his material a second time with the professor's criticisms and suggestions in mind, he set about to prove his critic to be wrong. He constructed an outline of the thesis and took this in turn to several professors and solicited their approval of the structure and form of the thesis in the hope of thereby producing irrefutable evidence of the first professor's error.

Dr. Frankwood E. Williams also relates an incident of a dean in a university who found it necessary to interview a student reported to him for doing failing work. This student had completed the previous year with an excellent record. When the dean inquired regarding the cause of his failure, the student replied that he was unhappy because he felt he was not liked and was not wanted at the university. He added that he had noticed this attitude on the part of both faculty and students and it so depressed him that he could not study. This student believed he had arrived at this conclusion rationally. Actually he did not understand the real cause for his depression. Consequently, as Dr. Williams observes, "he rationalizes by finding an explanation that will apparently satisfy the situation, although it will not be the true explanation."

<sup>17</sup> *Op. cit.*, pp. 50-51.

<sup>18</sup> *Op. cit.*, pp. 172-173.

In this case, the understanding dean did not argue with the boy with a view to convincing him of his error. On the contrary, he called in a psychiatrist who was able to assist the boy to discover the genesis of the emotion that was forcing him to the false conclusions.<sup>10</sup>

Popular writers on psychology have exploited the evil effects of repression and suppressed desires. They have taken the demonstrated facts that impulses tend to seek expression despite obstacles and that frequently a desire denied a healthy outlet works itself out in an unhealthy manner, to mean that all desires must be gratified and that only disaster follows repression. As a matter of fact, the gratification of all of our wishes is literally an impossibility. Numerically as well as logically and ethically wishes run counter to each other. It is impossible to realize all of our impulses. Our only recourse is to compromise and adjustment. The consequences of one line of conduct must be surveyed and appraised in imagination, weighed and measured and a balance struck. Sometimes one wish must give way to another, at another time a compromise program may be feasible, and still again a larger, richer and more comprehensive ideal will give unity and harmony to hitherto conflicting programs.

The redirection of an unacceptable or an unsocial impulse into a socially approved channel is designated *sublimation*. To no small degree civilization and civilized behavior rest upon this redirection of "natural" responses. The development of courts of justice and the substitution of contests at law for brute-force methods of settling disputes is but one illustration of means that men have developed to rechannel the expression of primitive impulses. The substituted line of action may be physical or mental. As Burnham puts it, a man may strike me and my natural impulse may be to knock him down. I may reflect, however,

<sup>10</sup> *Social Aspects of Mental Hygiene*, pp. 23-25.

that a gentleman would not insult me and that no other person can. This response would then substitute for a physical response. He adds that anything in the way of an adequate mental response "is just as hygienic as the physical response . . . and a large part of the training in ethics and mental hygiene consists in developing such associated responses for the stimuli of fear, anger, and the like."<sup>20</sup> Morgan<sup>21</sup> believes that the substitution of a new line of activity for one in which we realize we have failed is an essential in mental adjustment. A frank recognition of our limitations, together with the selection of a substitute line of action, may not lead on to victory, but it is basic for a normal and happy life.

The value of work as a substitute outlet for thwarted desires and as a means for softening what would otherwise be an unendurable blow has long been recognized. Carlyle, for example, buried himself for days and weeks in work as a means of driving from his mind the fact of his wife's death and thus enabled himself for a time at least to "raze out the written troubles of the brain."

Many women use social service and school teaching as substitutes for raising a family of their own. The vocation a man or a woman follows may function as an outlet for his or her interests; or, as Morgan shows, when the vocational activity fails to afford this appropriate channel for expression, the avocation may well do so. "Thus we find prominent business men spending their spare time tinkering with automobiles, raising vegetables in back yards, or conducting amateur photograph studios."<sup>22</sup> Poetry, art, the drama, music, either as vocations or avocations, will serve the same purpose. Concentration upon one thing may lead to a successful career, but a successful

<sup>20</sup> Morgan, John J. B., *op. cit.*, p. 404.

<sup>21</sup> *Ibid.*

<sup>22</sup> *Ibid.*, p. 230.

life is more wisely grounded in the development of many interests and the maintaining of open channels for their expression.

It is, accordingly, an obligation of an educational system to lay the basis for this healthy development in the cultivation of numerous interests. Both the academic and nonacademic subjects should be viewed as progressive opportunities for the creation and guidance of worthy interests.

Art and music, handwork in its forms of wood and clay, or other media, physical activity through games and rhythmic dancing, are seen to be not "frills" in education but possibly indispensable means of expression for fundamental life drives. In the secondary school extra-curricular activities afford opportunities for the constructive direction of energy, and opportunities abound in each school subject for developing club activities or extra-curricular aspects of the subject which may vitalize its more somber phases. The general purpose should be to transform subject matter from something foreign and alien to the life of the pupil into genuine concerns of a worthy character.

We have not attempted in this chapter to describe all mechanisms of human behavior. Our effort has been merely to suggest, by reference to actual cases, the importance of a knowledge and an appreciation of the relation of emotional aspects of behavior upon school progress. We hope these illustrations will serve to indicate the wider implications for measuring pupil progress and guiding children in their educational activities. They should suggest, also, the need for a more intimate connection between the school and the home than at present exists. To the functions of the supervisor already described, therefore, we would add that of instituting a more understanding relationship among parents, teachers, and pupils. Accordingly we turn, in the next chapter, to a discussion of these wider implications of supervision.

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## CHAPTER XVIII

### SUPERVISION AND SCHOOL-HOME RELATIONSHIPS <sup>1</sup>

Anyone who undertakes to solve the problems involved in school and home relationships should bring to his task a contrite and humble spirit. At least there is good cause why this should be his attitude, since an adequate description of what constitutes a profitable and satisfactory school-home partnership must grow out of a valid conception of a vital and effective functioning of these two institutions in our changing civilization.

Moreover, this problem is relatively new, and new problems are always more complex than they seem at first glance. In the United States a generation ago the best school and the best home hardly engaged in more than a speaking acquaintance. To be sure, the writer remembers how, as a child in District School No. 4, he and his classmates were drilled to greet the parents who came to witness a Thanksgiving or a Christmas entertainment with the song,

Oh, dear, what can the matter be  
Parents don't visit the school?

but he is aware that the children and the teachers, as well as the parents, did not take this seriously. Indeed, it might be interpreted as a sign of weakness if a teacher carried a problem of discipline to a child's parents, and the best parents did not presume to interfere with the teacher's

<sup>1</sup> This chapter is a revision of a paper read at the First International Congress on Mental Hygiene, in Washington, May 5th to 10th, 1930.



work. A correct and proper relationship consisted, on the whole, in the educational right hand not knowing what the educational left hand was doing.

This may be said to characterize school-home relationships in the preindustrial era. In so far as the school and the home remain thus unrelated, they reflect a conception of education and child rearing which dates back to a relatively simple economic and social order. In this order the school's function was to give to the child an intellectual training which the home could not conveniently supply, while the main stream of educative influences, the forces which built up or tore down attitudes and dispositions and basically molded the character and personality of the child, were thought to proceed largely from experiences and institutions outside the school. The home and the community, in short, were relatively self-sufficient as educational forces, and the school functioned not as life, but as an agency supplementing real life.

The progressive development of our industrial civilization, in transforming — as it is most profoundly transforming — the character of home and community influences which bear upon the child, is defining anew the functions and responsibilities of the school, and by implication, the character of school and home relationships.

May we illustrate. A cause and also an effect of the confusion which characterizes the lives of people today is the multiplication of easy means of transportation and communication. The railroad, the automobile, and the aeroplane, the postal system, the telegraph, the telephone, and the radio are not merely shortening distances between places; they are abolishing stable relations between people in homes and communities. The lure of economic opportunity in distant fields was never so enticing as at present and never apparently so easy of realization. In the United States the automobile stands ever ready to transport the

poorest family from one end of the country to the other. A social worker reports to the writer that during the recent Florida boom the father of a large family in a New York tenement district distributed about half of his children among his acquaintances and packed the remainder, together with his wife, in a third-hand Ford and started out hopefully for Florida, with virtually no resources other than a tankful of gasoline.

Continuous and insistent influences upon the lives of children in home and community are probably becoming the exception rather than the rule. Professor W. C. Bagley reports from a state-wide school survey in California that the average family moves from one community to another every four or five years, and that one-fourth of the families move every two or three years. Not only do families move from place to place with startling rapidity; easy means of communication and transportation facilitate also easy retreat from boredom. Parents and children work and play more and more outside the family circle, and thus there proceeds a steady disintegration of family bonds and constructive family influences.

Not only are family and community relationships disintegrating; their educational character is changing. Under the old order, for example, children could associate with their parents in meeting the economic responsibilities of maintaining the home. Whether the child came from well-to-do or poor parents, he was enabled to enter understandingly into the economic activities that went on about him. Division of labor had not yet reached the stage of pulverization, and, consequently, in the home and out of the home, a child could learn from first-hand observation and experience how intimately dependent people are one upon another for furthering the common enterprises of living. In his essay on "Boy Life in a Country Town," G. Stanley Hall indicates that in a Massachusetts town, about the

middle of the nineteenth century, a boy learned in the regular activities of home and community the rudiments of some sixty trades. (The existence of Jacks-of-all-trades in this period indicates, of course, that one did not have to scratch far below the surface in order to detect the lines of understanding and common principles of procedure binding together the processes in different vocational activities.) The real business of living formerly operated in a child's experience from early childhood, and adults and children enjoyed contacts which could lead to a mutual understanding and appreciation such as are steadily vanishing under conditions of present-day living. The mobility of the population, to which we referred above, represents, in the main, a steady drift toward centers of population. Labor-saving devices and the necessary crowding of families into small living quarters in the city combine to take out of the home the activities of adults and children which formerly gave to the child a first-hand knowledge of and a serious contact with ways in which human beings secure for themselves the basic essentials of food, clothing, and shelter. True, sweatshop conditions of work frequently perpetuate child labor in the home, but this is of a deadly character, dwarfing and stunting child growth. At the other extreme is the unfortunate "fortunate" child, who shares little if any responsibility in the home and who receives all the goods of life with no conception of what they mean in terms of human effort and inventiveness.

Nor is it altogether a matter of excluding children from contact with economic processes. In relieving children from the economic load of sustaining the family, and in recognizing their right to a childhood freed from an adult's measure of responsibility, the modern home has tended also to exclude them from a genuine participation in family concerns. Miss Anna Gillingham reminds us that George Herbert Palmer "used to advise his students to share with

others their little joys and their great sorrows; not the happiness so great as to arouse envy or the petty annoyances and carping anxieties; but the little joys and the great sorrows." She illustrates the evil consequences, in a number of cases, that proceed from an attempt to keep sorrow from a child. Thus, a "child of excellent ability made a miserable school record. Her mind was always on her mother who had disappeared in her infancy but concerning whom she dared not ask her fond and indulgent father because she had been warned that he could not bear to talk about 'it.' When she was nearly grown and was told rather casually by an outsider that her mother was insane, her tone of ineffable relief was a revelation. 'Oh, then she really *was* insane.' What hours she had spent in brooding over that mystery!"<sup>2</sup>

Children do not share with their elders as they once did the serious affairs of life. Nor do they play as of old. Living conditions in the city do not tolerate free play, and the peaceful penetration of urban forms of play and recreation into rural districts is leading to the steady disappearance even here of earlier types of free association between children. In the Massachusetts town described by Hall, standards of conduct and behavior as between families were fairly uniform and play space was ample. Consequently, children could play without the supervision of adults, and the sports and games in which they indulged gave them varied and valuable social contacts. The child of today lives far more in an environment that is planned with an eye to the needs of adults. No matter how widely the tenement house and the luxurious apartment hotel may differ in the comforts of life, they are at one in their disregard of the needs of child life. The tenement house tends to drive the child onto the street for his play and

<sup>2</sup> Gillingham, Anna, "Different — Not Better nor Worse," *School and Home*, January, 1930.

recreation, with all the dangers, physical and moral, that this involves, while the apartment hotel restricts the child's activities to an environment that is dominated by adults, with its evil effects in the way of nervous strain and tension upon both adults and children.

We are thus in the curious situation in which children are at once more prized and more sympathetically appreciated than formerly and less considerately dealt with. Legislative protections have been built up against the exploitation of childhood, but the shift in the ratio of adults to children and the restricted conditions of modern living militate against healthy and normal growth. Professor Counts has called attention to the fact that in the United States in 1790 for every 1,000 children below sixteen years of age there were 780 adults. This proportion of children to adults remained substantially unchanged down to the middle of the nineteenth century. In 1900, however, there were 1,580 adults for every 1,000 children, "by 1920 approximately 1,880, and today the figures cannot be far from 2,000."<sup>3</sup> Thus it comes about that, coincidentally with a diminution of their economic exploitation, children are surrounded by a world of grown-ups, and are forced to live under conditions that are progressively difficult to harmonize with the interests and needs of children!

We have referred to the fact that tenement-house children and youth are forced to seek the streets for their play and recreation. Children of more fortunately situated families play under adult supervision at times wise, more often unsympathetic and unintelligent. In either case there is lacking a naturalness and a free interplay of personalities

<sup>3</sup> Inglis Lecture, *Secondary Education and Industrialism*, Harvard University Press, Cambridge, Mass., 1929, pp. 42-43. Statistics for 1921 indicate that in England and Wales there was a population of 27,386,244 above fifteen years for 10,500,455 below fifteen years. Similarly there were in Italy 26,692,597 adults as thus defined for 12,017,979 children, and in France 30,333,772 adults for 8,463,768 children.

essential to flexible growth. When the period of adolescence approaches, supervision and control too often become casual, if they do not entirely disappear. There is a progressive tendency for recreation to take place along horizontal lines, adults with adults and adolescents exclusively with adolescents; and since we evolve our standards and ideals out of our association with others, there should be little surprise over the fact that the younger and the older generations are finding less and less in common! If it is only on occasion that they meet in social festivities as well as in the serious affairs of life, it may be expected that it will be only on occasion that they will see eye to eye with reference to standards of conduct and behavior.

Not only are children and young people required to work out their standards of conduct in a less understanding relationship with adults than formerly; it is also true that the complexities of modern life accentuate characteristics of growth and difficulties of adjustments which were less acute or not at all present in a simpler order of society. One is tempted at times to question whether psychology and mental hygiene are revealing mechanisms of behavior formerly unobserved, or whether our so-called advance is merely progress in revealing and coping with maladjustments created by our complex civilization.

Take, for example, the mere fact of compulsory school attendance. Necessary as it is in an industrial civilization that the level of general intelligence be raised, the attempt to fit children into relatively uniform academic holes results in a harvest of personality maladjustments that clearly would not occur but for the fact of required school attendance.

A study of retarded children made by Dr. Esther Loring Richards may serve to illustrate this fact. Dr. Richards found that backwardness in school,<sup>4</sup> as indicated by the

<sup>4</sup> *The Elementary School and the Individual Child*. Reprint No. 127 of National Committee for Mental Hygiene, New York City.

repetition of grades, was by no means due in all cases to genuine mental retardation, but was frequently the "expression of various factors in the background, development, early training and personality traits of the individual children." A detailed investigation of individual cases of retardation revealed that many retarded children were possessed of traits such as shyness, obstinacy, sensitiveness, fear, laziness, daydreaming, and the like. Examination of these children further indicated that these handicapping characteristics had grown up in home and school situations to the point of retarding the child's progress in school and "as conflicting factors in the Binet-Simon tests, obscuring the native capacity to such an extent that a difference of from one to three years appeared between the child's actual age and tested age."

Individual study and treatment of these cases revealed that the traits mentioned had originated or developed because of lack of understanding on the part of school and home. In one case, for example, a child's timidity in school and embarrassment over initial failure was excused at home on the grounds of "nervousness" and set down at school to stupidity. A second child, born in Russia, and thus handicapped by a language difficulty, beaten at home "if he displayed too much initiative in discussing parental requests," and "who could rarely be induced to recite," had learned to cover "a mental attitude of fundamental shyness and reserve." Instead of asking that a question be repeated or explained, he gave the best answer he could and accepted the stigma of failure without comment. By virtue of the school's lack of understanding of the case, the boy was fast becoming what the teacher described as "hard-headed and plain stupid." A third child had attended country school irregularly and then had come to live in the city home of a kindly aunt. This well-intentioned woman was constantly pushing and prodding the girl into activities

that "almost stampeded the child's social resources." The artificial stimulation at home, and failure at school due to inadequate preparation, together with a self-consciousness enhanced by the fact that she was twice the size of her classmates, resulted in embarrassment that the school ascribed to limited intellect, sulkiness, and obstinacy.

These cases are but typical of a harvest which may be gathered in any school. Unintelligent homes and standardized conventional schools constitute the millstones which grind out of children's personalities a hopelessness and a futility that manifest themselves as "causes" for failure and maladjustment. In describing a group of eighteen children, all but one of whom responded later to remedial treatment and ultimately joined their comrades in regular classes, Dr. Richards writes:

Naturally the mental attitude of a child who has been passed from one teacher to another for a year or two without promotion is a very interesting study. Some of these children were calloused to ridicule, teasing, and loud rebukes, both at school and at home. Ambition and the spirit of rivalry had gone. They were bored time servers in the classroom, often organizing mild revolutions when the teacher's attention was diverted for a moment. Others covered up a sense of shame at not being promoted by various reactions attributed to their being "high-strung and nervous." They were exceedingly "touchy" over the slightest criticism or teasing, bursting into tears or explosions of cursing at the most trivial provocation. Still others seemed to have sunk into an uncommunicative state, never volunteering a remark and rarely answering a question, but quietly amusing themselves in a way to escape contact with the environment as much as possible. The general characteristics of the group and the personal traits of its individual members were so interwoven that in many instances it was impossible to say how much of the child's behavior was due to temperamental idiosyncrasies and how much was a defense mechanism developed to meet the school existence. Each child had his own story of shyness, obstinacy, sensitiveness, fear, laziness, etc.,



which undoubtedly played a large rôle in his failure to make a good start in school.<sup>5</sup>

It is not universal school attendance alone that today encourages personality maladjustments which were less common to the home and the school of the past. Indeed, the pressure for a higher level of education is in itself an effect of increasing necessity for adjustment to a kaleidoscopic social and economic situation. Dr. Gerald H. J. Pearson<sup>6</sup> has recently stressed the point that a goodly portion of the difficulties involved in adolescent growth are "not inherent in the physical changes of puberty, but result from the attitudes and divergencies of opinion in the social organization in which the adolescent lives."

One point at least should stand out clearly. The preparation of children for life in the world of today calls for insight and understanding, and a trained procedure in home and school such as was not formerly required, and, in consequence, the wisdom of that state of exclusive sovereignty which defines the traditional relationship between these two institutions can quite properly be called into question.

An industrial civilization is not content merely with sowing the seed and harvesting abundant crops of personality difficulties in school and home. The fact that life is rapidly becoming mechanized and children no longer mature under the conditions that existed when human beings expressed in proverbs or wise sayings, in literary forms or philosophical formulae, the funded experience of the race, means that childhood and youth are deprived of media of interpretation which have been the common property of past generations. To a country child

<sup>5</sup> *The Elementary School and the Individual Child*. Reprint No. 127 of National Committee for Mental Hygiene, New York City, p. 5.

<sup>6</sup> "What the Adolescent Girl Needs in Her Home," *Mental Hygiene*, XIV (January, 1930), pp. 40-53.

who has himself worked in the soil or who has witnessed the seedtime and the harvest, the Biblical injunction, "Whatsoever a man soweth, that shall he also reap," has its vital significance. Similarly folk songs and dances which symbolize the daily activities of people have a cultural and an ethical value which entirely disappears under industrial conditions. For the common man it is unquestionably true that the fear of God derives force and vigor from that virile family relationship in which the precept "spare the rod and spoil the child" was literally adhered to. But a father of a loosely knit family who attempts to observe this same injunction can by no means serve as a pattern for a just God. Peculiarly unfortunate is that generation of young people that lives under conditions which give a foreign character to the garb that now covers much of homely wisdom and the religious and philosophical expression of man's insight into life's meaning. No wonder that they insist upon discarding the old and striking out on their own resources! They do not spurn guidance; on the contrary they hunger and thirst for it, but he who would go with them and show them the way must become as one of them, young in heart and experimental in attitude.

The burden of our discussion thus far has been to indicate some of the changes in contemporary living which, of necessity, will define a new relationship between the school and the home. A more complete analysis would lay bare the transformations in other agencies which have served to orient the child in his world. Our primary purpose has been merely to suggest that in the future the school will assume the function of leadership in directing and coördinating the primary forces that play upon the child. It can no longer remain a supplementary agency. Out of it must come an interpretation of life which will breathe unity and purpose into the child's existence.

We cannot digress at this point, as we should like to do, to describe what this new conception of the school's function involves in the way of educational reorganization. It would require both a presentation and an appraisal of dominant trends in progressive education. It may be observed in passing, however, that forward-looking schools are already organizing with the purpose that from constructive work with concrete materials, from first-hand observation, or from excursions to museums, market places, farms, and factories (that is, from direct experience as well as printed page) children will acquire an appreciation and an understanding of how human beings have won for themselves certain basic essentials of living. Moreover, in group associations with their fellows children in these schools are encouraged to solve problems of social adjustment and to evolve workable standards and ideals of conduct. With increasing maturity they acquaint themselves more intimately and more thoroughly with the methods man has used to acquire control over his environment and to create conditions for richer living. Pupils thus come to see mathematics and science, mechanical invention, art, music, and literature as instruments of culture, as experiences in which they may engage and out of which they may forge their own values of life.

This is a very meager statement of the trend of the modern school. Inadequate as it is, it should be sufficient to indicate that, in exercising the function of an interpretative agency, the school is dependent upon the understanding and the coöperation of the home. If it is to give unity to the life of the child, it must influence for good the factors that operate upon him.

If the argument thus far advanced is sound, the conventional inventory of a supervisor's functions must be added to considerably. His budget of responsibilities will now include both parental and teacher education along new lines.

In their book, *The Child in America*, William I. and Dorothy Swain Thomas describe the activities of Parent-Teacher Associations in this country. They point out that, while these activities are varied and important, they center quite largely upon a control of the more obvious factors in the child's environment, such as securing better "films," better music, better art, eliminating the most harmful types and places of recreation, and the circulation of harmful books and magazines. They have promoted legislation relating to truancy, dependency, probation and illiteracy, and they have been most helpful in directing attention to specific health problems.

Work of this character is vital and must, of course, continue. Other activities will be added, however, once it becomes a recognized fact that the modern home, whether it will or not, is undergoing transformation, and that the wisest course to pursue under the circumstances is for parents to seek an understanding and an appraisal of the factors producing change with a view to their control in the interests of more intelligent home and child relationship. An honest effort on the part of parents to deal with a child's problem in school may prove to be the most effective preparation and introduction for an appreciation of his parental function in an evolving family relationship.

A supervisor will endeavor, accordingly, to devise ways and means for assisting parents to understand the purposes and aims of the modern school. When lectures and study groups present the contributions of present-day psychology toward an understanding of adolescent psychology and adolescent problems, parents and teachers may acquire therefrom more than a mere acquaintance with the purposes of the school. Out of this study may come, as well, analysis of their own homes and some conception of the presence and absence therein of conditions essential for better growth. For example, an appreciation of the re-

strictions placed upon play and the present exploitation of the play instincts by commercial interests in both rural and urban communities should lead to the organization of intelligent planning for the play and the recreation of children and youth.

We have already drawn attention to the prevailing tendency for young people and adults to secure their recreation in segregated groups. The absence of genuine community interests is one obvious explanation for the misunderstanding that exists between the younger and the older generations. Another cause for difficulty is the absence of any generally accepted standard or code of behavior within communities. Conscientious parents who seek to control the forces playing upon their children find themselves helpless. If the parents of Mary's chum are easy-going and exercise little supervision over their daughter, Mary may very shortly resent the "strictness" of her parents and chafe under what she believes to be unnecessary parental dominance. Not infrequently the most conscientious parents are baffled in their efforts to regulate wisely the lives of their children because they cannot reconcile themselves to the standards of their children's playmates. The school affords an opportunity for parents to work out consistent standards of conduct. In a number of schools parents, teachers, and pupils have coöperated in formulating the conditions to govern not only the social life of pupils within school, but as well the social activities out of school.<sup>7</sup> These joint efforts to solve problems that concern all accomplish far more than the mere definition of rules and regulations of conduct. They enable parents and pupils to understand one another in a way that was

<sup>7</sup> An effort of this character at the North Shore Country Day School, Winnetka, Illinois, is described in *Progressive Education*, December, 1929. Similar efforts involving a group of progressive schools in New York City are now under way.

previously impossible, and thus generate a mutual respect and appreciation.

Study groups and the organization of active efforts to regulate conditions of play and recreation for young people do not exhaust the possibilities of parental participation in the life of the school. A further outcome might also be the creating anew of activities in which groups of all ages, young and old and middle aged, can associate together. To the degree that the school can succeed in reviving recreational and social life along vertical age lines, it will give birth anew to a community of ideals and healthy bases of mutual understanding.

Associations between adults and the young need not be confined to recreation, although just playing together is important. It is possible in virtually every community to identify well-equipped and intelligently prepared parents with the work of the school in the capacity of club leaders. The selection of these leaders should rest exclusively in the hands of school authorities and their choice should follow as careful a consideration as is given to the selection of a teacher. Tact and discrimination are obviously required, but this field of parental coöperation is worth exploiting. These clubs will vary in character, from interests that grow out of school subjects, such as science, art, or shop, to hobby clubs that exploit profitably an interest in the radio, aviation, photography, and the like.<sup>8</sup>

It should be apparent that in urging the extension of school education to include parent education and parent participation in the school, we do not mean that parents are to sit at the feet of teachers. A conception of the teacher which this would imply may very well be an ideal worth striving for, but unfortunately it does not square with present facts. How competent, for example, to instruct

<sup>8</sup> Schools can secure much help in this connection from an organization such as the Junior Institute of Arts and Sciences, Inc., New York City.

parents in the management of their children are the teachers of whom Dr. Richards can write, in connection with her remedial work in the Baltimore public schools?

Not infrequently John Jones and I were introduced by the teacher before the whole class with the remark: "I'm glad you've come to examine John. He can't seem to learn a thing. I don't know what is the matter with him. John Jones, stand up and let the doctor see you."<sup>9</sup>

The limitations of teacher understanding and training for the type of school and home relationship which we are suggesting are indeed formidable. They should be squarely faced, for their character in each instance, together with the facilities of education at hand, will determine the supervisor's program for teacher education in service.

The most serious of these handicaps is subject-mindedness. Education for many teachers is still synonymous with schooling, and schooling of a traditional intellectual character. The necessity of driving groups of children abreast over standardized roads to knowledge blinds them not merely to the importance of factors in growth that are unrelated to the accumulation of information and study skills but also to fundamental aspects of development basic to these very purposes.

The responsibility for this one-sided emphasis in education dates back, of course, to the early beginnings of the school. Nor is its persistence entirely the teacher's responsibility. It is not uncommon for teachers to be judged on the basis of tests which measure superficially learning products of partial character and short-time growth. But whatever may be the explanation for this state of affairs, it is true that the evils of a subject-matter consciousness are accentuated as the child proceeds from primary school through elementary school, high school, and college. Thus

<sup>9</sup> Richards, Esther Loring, *op. cit.*, pp. 4-5.

it is that Dr. C. Macfie Campbell can write of college education:

It is somewhat perplexing to see students acquiring great blocks of information on certain topics, or developing a special technique of study along certain lines, and equipping themselves for industrial and professional tasks in virtue of these special abilities, while the background of their life on which their economic activity will be displayed is completely neglected. The student may pass through his college course without its being necessary at any stage for him to review the principles underlying human behavior; without his being required to take stock of the hidden source of his own interests and beliefs and habits and moods; without his becoming aware that these moods and beliefs and interests, which are going to give to his individual life its special value, have definite biological determinants which work according to certain definite laws, and some knowledge of the control of which may make all the difference between stability and instability of his life. A college education does little to prepare anyone to meet the fundamental issues of life any better than the ordinary individual. It is stated that, in the prisons of the United States, college graduates have a representation in due proportion to their number in the community. The study of nervous and mental patients with college degrees often reveals a striking discrepancy between the academic culture and the lack of any grasp of the fundamental principles of mental health. Yet the colleges should be the source of the community-wide diffusion of knowledge with regard to the above principles; it is from the normal schools and colleges that there pass out the future teachers, religious leaders, physicians, lawyers, journalists, and other professional workers.<sup>10</sup>

The teacher's training and experience as a teacher also militate at present against a full understanding of the child. Teachers know children in but one setting. The best schools have light, cheerful rooms, abundantly equipped with educative materials and supplies, so that the child

<sup>10</sup> Williams, Frankwood E., and others, "Mental Hygiene and Education," *Social Aspects of Mental Hygiene*, pp. 59-60. Yale University Press.



can engage profitably in experiences adapted to his level of development. Furthermore, the child's associates in school are predominantly of his own chronological and social age. In so far as teachers deal with children exclusively in this well-ordered context, they are little prepared to give aid and comfort to parents who are struggling with the problems of adjustment of children with adults in a predominantly adult environment, or of children with children of such varying ages that their interests are either foreign to each other or in positive conflict. If we can argue, as we have done above, that parents will receive insight and suggestions for intelligent parenthood by familiarizing themselves with the work and the purposes of the school, must we not likewise maintain that teachers are ill-prepared to organize and direct intelligently educative experiences of children, so long as they are ignorant of the fundamental problems of home relationships?

Teachers, likewise, suffer from positive disabilities. In the United States the unmarried teacher predominates, and in many schools an unfortunate ban is placed upon married women as teachers. Consequently, the teacher frequently lacks a normal and balanced judgment not only on matters of sex but also with reference to the importance of behavior traits that function in an integrated personality. In Chapter V we drew attention to Wickman's study of *Children's Behavior and Teachers' Attitudes*, which indicates that teachers tend to identify as problem children those who manifest aggressive traits, while the less aggressive and more distinctly personal problems, such as shyness, unsocialness, sensitiveness, fearfulness, suspiciousness, dreaminess, are neither identified so readily as the aggressive traits nor are they rated by teachers as of equal importance. Consequently, teachers themselves are badly in need of education which will enable them to detect deviations from the normal on the part of pupils and

to institute reconstructive work at home and at school for children who require it.

Dr. H. E. Chamberlain, Director of the Child Guidance Clinic in Minneapolis, calls attention to further handicaps in the training and experience of teachers which make it difficult to introduce into schools the services of a guidance clinic and that attention to problems of individual adjustment upon which a clinic concentrates. Thus he writes:

A school system is bound by tenure laws to include teachers of long standing who tenaciously cling to their early instruction, which accepted punitive rather than therapeutic measures for the atypical. Naturally, for them it is easier to threaten than to encourage, to punish than to treat; and for psychiatry to propose a change of viewpoint is to incite a personal revolution within them. 'Tis easier for mankind generally to reject or ignore and thereby remain secure than to accept and be made miserable with added responsibilities. Their rejection of psychiatric interpretation, then, is a personal one and to be coped with accordingly. Again, the present-day trained teacher has had presented to her the social sciences and numerous contributions of psychology to curricula, to classifications, to correlations, to standards, to graphs, to objective examinations, to ratings, group or individual, to indices, ad infinitum. Whether or not these applied facts and methods be understood, at least they sound familiar, whereas the nomenclature of psychiatry is foreign, unfamiliar and changing from the static to the dynamic and enlivened by the psychoanalytic. Surely for the teacher, this obscurity of terminology, if not transposed to simplicity and the familiar, is just a jargon masquerading as scientific and should be shunned by the right-minded. Again the attitude of a community toward psychiatry sets the standard for a public school teacher. Teachers are recruited from an intellectual class in the community and have learned first hand that psychiatry in the past has long been isolated, away in institutions with the committed insane, intent on learning of the abnormal. The psychiatrists along with physicians and psychologists, who, too, in their pioneer work dealt with the study of the diseased and the defective, have only in recent years become interested in the normal, the healthy or,

at least, in prevention of further defects or progressive disease processes — a fact new to most and therefore reluctantly accepted. A child guidance clinic to succeed in any community must take stock of the community attitude as reflected in the teaching body of its public schools. As noted before in this paper, the remedial results, obtained in the individual case, chronic or incipient, are as reliable an index as any in the acceptance or rejection of psychiatric interpretation. It should be added, in all fairness, that the psychiatric examination is welcomed by that small class of teachers which would rid itself of the problem child as abnormal; but if, perchance, the disturbing child is found to be normal, not abnormal, then is psychiatry again looked upon unfavorably, viewed as impractical and fit only to serve unassisted the mentally ill and the "bewitched." And, lastly, in this brief discussion of the rejection of psychiatric interpretation, one should note that teachers are well within their right to question the impracticability of any technique which does not effect an immediate change. Their entire training is devised to detect daily, weekly, and monthly progress. Classroom or individual lapses, omissions, retrogressions, and repetitions are academic anathemas, so retroactive and reflective upon teaching ability are they held to be. Assignments are given, passed upon, work is reviewed, a course is completed and a class is promoted, whereas psychiatry emphasizes the non-anticipation of regularity, rapid progressive change in situations which have taken months or years in their making and views all — lapses, omissions, retrogressions or repetitions — tolerantly, sympathetically and analytically. These two viewpoints are far apart, and it is no more, if as much, the teacher's obligation than it is the psychiatrist's to meet part way and thus bridge the gap which ever threatens to widen. It is the writer's opinion that wherein psychiatry fails the teacher most is in being negligent to speak a simple language, free of technicalities, dispassionately and without belligerency.<sup>11</sup>

It is not our intention to charge teachers with incompetence. There are, of course, thousands of cultured, well-

<sup>11</sup> Paper read at First International Congress for Mental Hygiene, Washington, D. C., May 5-10, 1930. See *Proceedings* published by the American Foundation for Mental Hygiene, Inc., New York City.

integrated individuals, who are possessed of sympathetic insight into child nature and are functioning as leavens of healthy influence in schoolroom, home, and community. We have attempted merely to enumerate certain conditions which, by and large, prevent teachers from giving adequate consideration to the elements involved in educating the whole child. It becomes the duty of supervisors, therefore, to offset these disadvantages as well as they can by devising ways and means for educating their staffs.

The existence of a child-guidance clinic in the school system is of inestimable value for this purpose. The values and the functions of child-guidance clinics in both rural and urban districts have been fairly well established. In the paper from which we quoted above, Dr. Chamberlain indicates briefly the constitution of an effective clinic. He states:

A public school child-guidance clinic equipped to offer a multiple unified study best utilized by educators consists of a staff made up of psychiatric social workers, psychologists, pediatricians and psychiatrists. The psychiatric social worker prepares a study largely sociological in type, tempered by individualistic medical and psychiatric aspects. That is, the history prepared by the worker presents the family background, the personal development of the individual with history of health and habits included, a description of the home and community life, a record of the individual's school progress and adjustment, a presentation of personality traits and finally an outline of the individual's behavior or conduct. The psychologist, with the psychiatric social history at hand, examines the student individually by standardized and selected psychological tests to ascertain verbal, ideational, mechanical and achievement abilities as well as personality traits. The pediatrician or physician, with the findings of both psychiatric social worker and psychologist, makes a complete physical examination and, if indicated, requests the necessary laboratory examinations and renders a report in regard to the student's physical state. With the three reports — social history, psychological and medical — the psychiatrist examines the student. Whereas the

previous studies are more or less nonvariable and didactic, the psychiatric interview lends itself readily to informality and freedom from the restraint of examination, if skillfully conducted, and thereby is the student given an opportunity to express confidentially, unabashed and unafraid, his beliefs, desires and attitudes toward life generally and specifically. The examination may be supplemented by a neurological examination to exclude truly organic manifestations. With the reports summarized, a staff conference is then held and recommendations are outlined in regard to the therapeutic needs of the student's physical condition, home supervision, school program and guidance, and ultimate adaptation to associates. Permeating every recommendation, consideration is given to the effects of sense of failure and fear upon the child and the stigmata others have attached to the child.<sup>12</sup>

Not all schools at present are in a position to maintain a guidance clinic. Consequently, there is needed a campaign of education which will lead to their establishment in rural and urban communities. In the meantime the progressive supervisor will have to utilize what resources he can command in order to move in the direction we suggest. He cannot ignore the responsibility of increasing the sensitiveness of his colleagues to the importance of aspects of personality development hitherto ignored in their professional education and training. Here and there, however, colleges of education are attacking the problem in a broad way. Moreover, in many places school officials and forward-looking parents are coöperating in the establishment of study groups for teachers and for parents and in the setting up of guidance departments. Adequately trained psychologists and carefully selected members of the staff of a guidance clinic can be utilized in a dual capacity: for remedial work with children, and for instructional purposes with teachers and parents. The connection of such a department of the school with the faculty should be that of improving

<sup>12</sup> *Op. cit.*, pp. 5-6.

teachers in service through group faculty meetings and individual conferences on problem cases, and similarly with parents by means of conferences on individual children and discussion groups organized under parents' organizations. It should not be overlooked that the education of the child is by no means safeguarded when teachers and parents have centered upon understanding the child, important as this may be. To this must be added a self-understanding on the part of teacher and parent. Learning how to regulate wisely one's own life is an integral part of the management of the child. Consequently, self-guidance of the teacher and the parent becomes likewise one aspect of faculty programs for teacher improvement and courses of instruction under the auspices of parent-teacher associations.

We conclude, then, as we began, with the statement that a valid conception of school and home relationships proceeds from an accurate idea which these two instruments for richer living are to occupy in contemporary civilization. What he conceives the function of the school to be in this new order will give character to the supervisor's function as an educational leader in his school and community. As he thinketh in his heart, so will he direct his energies toward parent and teacher education.

The argument of this chapter presupposes that industrial civilization is transforming the character of community and home relationships. The machine is modifying rural life no less than city life. As Joseph K. Hart has so well stated:

Industrial development in the past century, with the growth of huge factories and the piling up of congested populations, has destroyed the old time community, which was ever the chief support of the individual child in its efforts to become a mature and well organized human being. . . . The modern "community" — rural, village, town, small city, large city — is disorganized.<sup>13</sup>

<sup>13</sup> *Social Interpretation of Education*, p. 15. Henry Holt and Company.

The family, the church, and the community formerly constituted the dominant forces which shaped the individual's life, while the school served in a subordinate and incidental capacity. Of these four institutions today the school alone seems to be increasing in vigor and influence. As the community disintegrates and the home becomes confused, the school serves more and more as the focussing point for influences bearing upon the child. Upon it rests now the responsibility for both developing the child's personality and socializing the individual in the interests of the future.

To meet this new responsibility, the school itself is undergoing transformation. It is developing a sensitiveness to factors in the child's growth to which it was formerly indifferent. It is now concerned with the education of the whole child, not, as of old, with one or two aspects of his nature. But in this endeavor to broaden and to deepen the character of education several obstacles are encountered. In the first place, the teacher who is an indispensable instrument in any educational program is often inadequately prepared both by training and experience to serve in this new capacity. And, secondly, the home, with whose activities the new education becomes intimately interrelated, suffers from distraction and lack of direction. Where unity and purpose once dwelt, confusion and uncertainty now commonly abide. Consequently, the school's task involves more than the education of the child. Adult education of a character that will enable both teachers and parents to generate purposes and practices appropriate to the new demands of life becomes as much the aim of the school as does the education of the child.

As we have already indicated, the instrumentalities for carrying on the education and training of parents and teachers will assume both an emergency and a permanent character. Until teachers are equipped in the ordinary

processes of teacher training to give attention to the education of the whole child, their efforts in school will require supplementation by other agencies in the school, and at the same time provision must be made to train teachers in service along these essential lines. The goal in mind is a relationship of full understanding and sympathy between home and school such that these two forces together can read unity and meaning into the child's life. The complete working out of such a program involves the establishment of clearing houses of information between school and home, through personal conference on individual children or individual school and home problems, and study groups for teachers and parents under both school and parents' auspices. These study groups, where possible, should provide open channels to action. Furthermore, they should center upon giving, on the one hand, to the parent both knowledge of what the school aims to accomplish for the child and an understanding of what is involved in successful child-parent relationships in the home; and on the other, they should provide for the teacher not only an acquaintance with what is needful for a well-rounded education of the child in the school, but also an understanding and sympathetic insight into the problems which parents face under prevailing conditions of home life.

The content and the methods to be utilized in this program will vary with the background and preparation and with the function of those who participate in it. The methods and the instrumentalities appropriate for teachers are not the methods and the instrumentalities appropriate for parents. The ends of education may be the same for all — a better knowledge about and a more effective ordering of one's life in relation to his fellows — but the means will be peculiar to the status of the child, the parent, and the teacher. Administrative necessity will also devise appropriate differentiations in functions as between parents



and teachers; but the school in process of evolution views the child, the teacher, and the parent as actively engaged in a never-completed learning process. Adequate school and home relationships thus presuppose that parents and teachers are united in a common endeavor to bring to flower in children the potentialities of healthy living and to weave a scheme of vital human interrelationships in home and school and community consistent with the rich possibilities of coöperative living.

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## Part IV

# THE ORGANIZATION OF SUPERVISION



## CHAPTER XIX

### GENERAL PROBLEMS IN THE ORGANIZATION OF SUPERVISION

The history of public-school administration and supervision in the United States indicates a gradual centralization of power and responsibility in the office of the superintendent of schools. Prior to the present century, the administrative and supervisory functions were vested in school committees or boards of education. The members of these boards visited the schools in order to see that the teachers were carrying out the duties prescribed by law, and to ascertain and meet the material needs in the form of equipment, libraries, and the like.<sup>1</sup> As the schools grew, these functions were of necessity delegated to special committees or officers, such as "school visitors" or clerks, appointed by the board of education. It was not until 1837 that the office of superintendent of schools was created. Buffalo and Louisville<sup>2</sup> were the first cities to employ

<sup>1</sup> It should be noted that even at the present time many boards of education, especially in the smaller centers, still exercise many of these functions, even though they nominally employ a superintendent or principal. They pass judgment on teachers, select and adopt textbooks, and dictate school policies. The superintendent or principal merely carries out the orders of the board. Happily there is a tendency toward delegating much of this authority to the administrative officer, though many of these board members guard their authority very jealously and permit no delegation of power, with the result that the policies of the school are frequently not determined by an enlightened professional intelligence.

<sup>2</sup> For a more extended discussion of the historical development and present status of administration and supervision, see:

Ayer, Fred C., and Barr, A. S., *The Organization of Supervision*, Chs. I, II.

Cubberley, Ellwood P., *Public School Administration*, pp. 71-84.

administrative officers charged directly with the responsibility for the control of educational policies. It is significant that at the present time more than three thousand cities of over twenty-five hundred population employ superintendents of schools.

At the same time there has been a corresponding development of rural-school supervision in most of the states, through the office of the county superintendent who is directly charged with the responsibility for organizing a program of supervision. State coördination is secured through the state department of education. Two of the best-known systems of county supervision are Baltimore County, Maryland, and Cuyahoga County, Ohio.

This increase in the number of administrative and supervisory officers has been marked by a corresponding increase in the scope of administrative and supervisory functions and a corresponding decrease in executive powers exercised by boards of education or special committees appointed by them. J. B. Edmonson lists this fact as the "first achievement in administration." He says:

A view of the development in school administration over a twenty-five year period discloses a gradual evolution from the status of uncertain leadership to the present achievement of rather highly professionalized direction. With the passing years administration of public education has been growing in favor, and the powers and responsibilities delegated to administrative officers have been increasing in scope. This development has been due in a large part to the fact that public interest in education is so great that state and local authorities are determined to have competent and effective administration of schools.

As the first achievement in administration I will cite the fact

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Morrison, J. Cayce, *Legal Status of the City School Superintendent*, pp. 9-29.

Edmonson, J. B., "Achievements of American Education — Administration," Department of Superintendence, Official Report, Atlantic City, New Jersey, 1930, pp. 72-77.

that the position of the school executive has been gaining steadily in social favor and has been continually acquiring enlarged responsibilities. On the question of the growth of functions, Haggerty says: "With the passing years, the position of school executive grows in social favor and its delegated powers increase in scope and stability. The accretion of function is constant, tenure tends to become indeterminate, and economic status ever more adequate and secure. It is a matter of deep significance to American life that in hundreds and thousands of communities throughout the land the school executive, as university president or superintendent of schools, is the most highly salaried public official either in state or local unit; his tenure, although loosely protected by law, tends to remain secure through changing political control and his influence excels in potency that of any other public servant. A tangible expression of this condition is the fact that for few, if any, other positions has the public been willing to accord a salary equal to that of the nation's vice president; and commonly throughout the country, American society pays more for its school executives than it does for any other publicly employed servants whether professional or political in character."<sup>1</sup>

The writer suggests that the old assertion, "As is the teacher, so is the school," might very appropriately be replaced by the new truth, "As is the superintendent, so is the school system."

The responsibility, then, for so organizing the school system as to foster and encourage the democratic ideal is placed squarely upon the shoulders of the superintendent of schools. So complete is this authority and responsibility that the philosophy of the superintendent, for good or evil, permeates the entire school program. If he is arbitrary and autocratic, the organization which he sets up will very likely be designed to perpetuate this ideal, with the result that the very essentials of professional growth

<sup>1</sup> *Ibid.*, pp. 72-73. Quoted in part from Haggerty, M. E., *Training of the Superintendent of Schools*, Bulletin of the University of Minnesota, No. 17, 1925, p. 3.

on the part of teachers will be lacking. Initiative, independence of thought and action, and the opportunity to see the wider implications of their work will be subordinated to the operation of well-oiled machinery which may masquerade under the name of scientific management and supervision. In previous chapters, the writers have paid their respects to the concept of the public-school system as a "big business organization." The point which we wish to emphasize here is the significance of the supervisory organization which is set up by the executive head of the school system, as an instrument for the carrying out of the purposes of education.

An interesting example of the manner in which the philosophy of the executive head of the school system is reflected in the organization and administration of supervision is cited by George S. Counts<sup>4</sup> in his analysis of the "clashing philosophies of superintendents" in Chicago during the administration of William McAndrew. The social philosophy of Ella Flagg Young, strongly influenced by direct personal contact with such dynamic personalities as John Dewey and Francis Parker, was permeated with the idea that:

. . . the talents and experiences of the entire professional staff might be pooled in the formulation of educational policy. She was convinced that the development of a strong and self-confident profession of teaching is possible only if heavy responsibilities are placed upon the individual teacher. She abhorred the doctrine that it is the chief function of the teacher to receive and obey orders issued by his superiors. While studying at the University of Chicago some years before she became superintendent, she matured her theory of school administration and gave expression to her ideas in a doctor's dissertation under the title of *Isolation in the School*. This little volume has become the hand-book of the Chicago Teachers' Federation, the most powerful and aggressive of

<sup>4</sup> *School and Society in Chicago*, Ch. V. Harcourt, Brace and Company.



the many teachers' organizations to be found in Chicago today. Leaders of the Federation state that they constantly turn to it for inspiration and guidance in the formulation of their policies.<sup>5</sup>

The close relationship with the teaching staff which Mrs. Young established was fostered and developed under the administrations of her successors, John D. Shoop and Peter A. Mortenson.<sup>6</sup> The teachers' councils were closely integrated with the administrative organization and wielded great influence upon the policies of the school.

When William McAndrew began his duties as superintendent in 1924, he discovered that there was no very clearly defined administrative policy providing for the definite fixing of responsibility. He complained that the teachers took their troubles directly to the superintendent, frequently ignoring the principals and supervisory officers, who were barred from membership in the teachers' councils. As Counts points out:

The ideal of business efficiency seems to have dominated the entire administration. Mr. McAndrew entered upon the duties of his office with the definite assumption that slackness, indolence, and general inefficiency characterized the conduct of the schools of Chicago. This he attributed in part to the demoralizing influence of the war period, in part to the methods of administration that had grown up in the course of years, and in part to the operation of the political factor in the management of the educational system. He adopted the slogan, "Every man on the job"; he reduced the number of holidays and dismissals; he introduced the time check for all employees of the board of education; he emphasized the use of objective tests in the appraisal of the work of teachers and principals; and for the purpose of definitely placing responsibility

<sup>5</sup> *Ibid.*, pp. 66-67.

<sup>6</sup> Charles E. Chadsey, former Superintendent of Schools of Detroit, served but a few months following the death of John D. Shoop in 1918. He was prevented from exerting much influence upon the school system by a pernicious political machine which sought in vain to control his administration.

and the reduction of waste, he brought about a fundamental reorganization of the administrative system. Almost every policy advocated was defended on the grounds of efficiency. In general, and for reasons altogether obvious, this philosophy recommended itself to the business interests of the city, whereas it irritated and antagonized the teaching staff and organized labor.<sup>7</sup>

It is, of course, impossible to analyze completely all of the complex factors which entered into the turbulent Chicago situation. It does, however, serve as a convenient illustration of the enormous influence which the head of an educational institution wields. On the one hand, this influence, finding expression through a type of organization which emphasizes interdependence and coöperative endeavor, may result in professional growth for every member of the organization; on the other hand, the major emphasis may be placed upon the fixing of responsibility, and the maintenance of a rigid system which permits no variation and, consequently, stifles the development of initiative and the expression of individuality.

While our discussion is concerned primarily with the organization of the high school for supervision, yet the place of leadership which the principals, supervisors, and department heads occupy is determined to a large extent by the nature of the general organization of which they are a part. We shall, therefore, sketch briefly the more common types of administrative and supervisory organization which are in use in more or less modified form in our leading American cities. They will be discussed with particular reference to the problems of promoting democratic supervision.<sup>8</sup>

<sup>7</sup> *School and Society in Chicago*, Ch.V, p. 74.

<sup>8</sup> The reader is referred to the following sources for extended discussions of the general types of administrative organization:

*The Superintendent Surveys Supervision*, Department of Superintendence, Eighth Yearbook, Ch. IV.

Ayer, Fred C., and Barr, A. S., *op. cit.*, Chs. I, II, VI, VII, VIII.

The most common type of administrative organization is that which is designated as the "Dualistic System," though in effect it is no more dualistic than certain other types. In this scheme, the teacher is responsible to the principal for matters of attendance, discipline, promotions, and such general supervision as he is able to give, and to the special supervisors for technical supervision in the various fields. Both the principal and the supervisor are responsible directly to the superintendent or to his primary administrative staff officers, usually designated as assistant superintendents.

This system in many instances antedates the beginnings of special supervision which became established when the newer subjects, such as the practical and fine arts, music, and the like, were introduced into the schools. Since the principal as a rule was unable, through lack of knowledge of the field, to give adequate supervision, special supervisors were employed. These supervisors were usually under the direct control of the superintendent's office, since their services extended to the several schools of the district. With the growth of supervision, academic-subject supervisors were added, whose responsibilities cut directly across those of the building principal.

Frequently the result of this conflicting authority is friction and a subordination, either of the supervisory activities of the principal, or of the special supervisors, depending upon the policy of the executive head of the school system. If he strongly favors special supervision, then the special supervisory staff is granted more authority, the result of which, in many instances, is that the principals abandon all attempts at supervision, devoting their attention exclusively to administrative matters. On the

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Melby, Ernest O., *Organization and Administration of Supervision*, Ch. IX.  
Nutt, H. W., *Current Problems in the Supervision of Instruction*, Chs. IV-IX.

other hand, if the superintendent favors the centering of direct responsibility for both administration and supervision upon the building principal, the supervisory staff is reduced in authority and it serves only in an advisory capacity, to be utilized when its services are thought to be needed.

While this system is condemned by many authorities in the field of school administration, it may, under a proper conception of supervision, function admirably. Its success, so far as the secondary schools are concerned, depends upon the professionalization of the principalship, the recognition of the department headship as having vital significance, and the coördination of the work of general and special supervisors through the leadership of the superintendent and his staff. It is readily admitted, however, that all these conditions are rarely met. Possibly the more frequent situation is that which is summed up by Ayer and Barr as follows:

There appears to be a general sentiment in these schools that supervisors are merely a necessary evil. Some superintendents seem moved to offer an apology for such supervisors as they have whenever the subject is raised. For these reasons it is not necessary or desirable to make further mention of the extrinsic dualistic type of supervisory organization.<sup>9</sup>

The "Line and Staff" system, illustrated by such cities as Detroit and Chicago, provides for a staff consisting of officers in charge of special service departments, such as personnel, tests and measurements, buildings and equipment, and subject departments, such as art, music, English, or mathematics. The members of this staff as a rule are technical experts who have little or no administrative authority. It also provides for a "line" which consists of administrative officers, such as assistant superintendents

<sup>9</sup> *Op. cit.*, pp. 212-213.

in charge of the various divisions of the school system, and principals. There is a direct line of authority from the superintendent of schools to the teachers, through the assistant superintendents and principals. These line officers are clothed with full administrative authority and are strictly responsible for the operation of the educational program.

The dualism complained of in the traditional type of organization previously discussed is eliminated in much the same manner as the troublesome mind-body dualism has been disposed of by modern psychologists — by getting rid of one of the members. The clash of authority between the "line" and "staff" is eliminated by divesting the staff of authority. Thus, in some systems the special supervisor is an advisory expert who has no authority and who shares no responsibility with the principal for the carrying out of the educational program. The system of "supervision-on-call" flourishes under this type of organization.<sup>10</sup> The chief merit of this plan is the autonomy of control and the consequent elimination of friction due to the clash of authority. Its defect is that the machinery of the plan makes it very easy for a superintendent having the "philosophy of big business" to subordinate a coöperative plan of supervision, which is so essential to professional growth, to a program of administrative efficiency in which smooth-running machinery is the mark of effectiveness.

The third plan of organization, typified by Cleveland and Seattle, is known as the "Coördinate System." As the name implies, it is based upon the educational theory that supervision and administration are coördinate functions of the general program, which consequently must be recognized and given equal emphasis. The primary administrative staff consists of assistant superintendents in charge of general divisions, such as elementary, secondary, ex-

<sup>10</sup> For a critical analysis of "supervision-on-call," see Ch. IX.

tension, and special service. Both principals and supervisors or other staff officers work under the direction of the appropriate primary administrative officer. Their functions are closely coördinated so that the problem of control is subordinated to the accomplishment of a unified and integrated educational program. The following explanation of the manner in which administration and supervision are coördinated is quoted from the Department of Superintendence, Eighth Yearbook:

Under this system, the local principal of a building in charge of institutional supervision is held to be functioning at the same organic level as the director of a special department in charge of a subject or a service. As supervisors, both principal and director are assumed to be equally interested in the improvement of educational procedure; as administrators, each is assigned coördinate responsibility — the principal over a group of teachers and pupils, the director of a department over a group of assistants and special services; and as co-workers, they are expected to coöperate deliberately, working at the same administrative level and each with authority over his own special field under conditions set up by the superior primary administrative staff. The coördinate system places little emphasis upon developing supervision and administration separately as distinct educational services leading to separate sets of school officers in charge of each, but instead assigns its duties upon a purely functional basis, grouping them around two major coördinate forms of service; namely, departmental and institutional.<sup>11</sup>

Thus, in the secondary field, the work of coördinating administration and supervision would rest primarily with the assistant superintendent in charge of the secondary division. The principal and the directors of departmental service, such as (1) special subjects, (2) vocational education, (3) physical education, and (4) guidance, would be immediately responsible to him. Since both sets of officers

<sup>11</sup> P. 56.

are charged with administrative and supervisory powers, they must coöperate fully in the discharge of their duties by means of representative committees, group conferences, and certain general allocations of functions.

It has been argued that in this system responsibility is not so clearly and definitely defined. Friction and frequent 'clashes of authority may result as a consequence and thus cause disruption and interfere with the smooth operation of administrative machinery, which is so dear to the heart of some executives. This is certainly true, but on the other hand, by setting up the machinery whereby coöperation is made possible and is expected to result, it is more probable that common problems will receive the attention of all concerned, rather than of relatively autonomous groups having little contact with each other.

Democracy always carries with it the danger of ineffectiveness and friction, but in the last analysis it is the most satisfactory way to solve problems because it provides the conditions for individual growth. The difficulties must be overcome by wise guidance and genuine leadership. While it is not claimed that any particular type of organization will directly further democracy, certainly the coördinate type has within it great possibilities in that direction.

In conclusion it must be pointed out that no single type of organization is best adapted to all situations; and that, consequently, the final test of a supervisory organization is not a "paper" or schematic representation of it, which indicates its *possibilities* for furthering growth, but rather is to be found in a study of its actual operation in each situation. While certain types of organization *facilitate* coöperation, it is only *guaranteed* by a highly trained group of professional workers bent upon furthering the ideal of a democratic society through a progressive refinement of that ideal within the school organization.

It is also true that the organization of a school system

must not be permitted to become static. It must undergo modification in the light of the needs of the system. For example, with the introduction of highly trained teachers, department heads who are especially trained in supervision and are given time to exercise leadership, and principals who hold their position by virtue of the special personal and professional qualifications which they possess, the need for highly trained specialists connected with the primary staff will become less apparent. This will necessarily result in a modification of an organization which perhaps has been built upon the conception that the teacher must be "shown" how to teach.

Again, with the extension of the progressive movement in education, which is taking the form of a more thoroughly integrated curriculum with less emphasis upon logically organized subject matter restricted to a limited area and carefully insulated from other fields, the need for a type of supervision which is concerned with coördination of activities, as well as with the selection of subject matter, becomes evident. This does not mean that the special supervisor may be safely dispensed with, but it does mean that the supervisor with a broad general training, capable of seeing significant relationships among the different fields represented by the curriculum, will become increasingly necessary. Hence, whatever type of organization is employed, educational leaders should be sensitive to the necessity for continuous modifications to meet the demands of a rapidly changing social order in which the school must exercise a position of dynamic leadership rather than passive acceptance.

The ultimate worth of any type of organization must be determined by the contributions which it makes to the refinement of the democratic ideal of society, in which the uniqueness of each individual is stimulated and developed through a process of continuous widening and deepening of



the vital interests which are held in common. This criterion of growth must be applied to all individuals who are touched by the school program — pupils, parents, supervisors, and boards of education. Just to the extent that the organization is dominated by the autocratic spirit are these ends defeated.

We now turn to the more specific problem of the organization of supervision in the secondary school. Basically the problems involved in secondary-school supervision are the same as those of the other divisions of the educational system, but certain significant differences, due to such factors as training of the staff and the organization of secondary-school instruction, introduce special types of problems which require slightly different treatment.

It is perhaps safe to assume at the outset that, regardless of the general type of supervisory organization which is used, the final responsibility for the development of a supervisory program must rest with the principal of the secondary school. This does not mean, of course, that all of the available supervisory agencies of the school system do not have contributions to make. It does mean, however, that the task of coördinating these instruments, so as to make them function as a dynamic, integrated whole, must be performed by the principal and his staff. So far as the secondary school is concerned, we may well change Edmonson's statement "As the superintendent, so the school system," to read, "As the principal, so the high school." He is the person who is in closest touch with the pupil, the teachers, and the public. As a consequence, he is capable of rendering effective service as a genuine educational leader.

It would therefore seem logical that the major function of the secondary-school principal should be the direct improvement of learning. Franklin Johnson aptly expresses this attitude in the following statement:

It would seem unnecessary to say, were it not that ordinary school management indicates little recognition of the fact, that instruction is the most important activity taking place in the school; in short it is for the sake of instruction broadly conceived, that the state has set up the entire machinery of the school and incurred the expense of its operation. It is apparent, then, that the improvement of instruction is the most important aim which the principal should have in mind in arranging the schedule of his activities.<sup>12</sup>

Does the principal accept the supervisory responsibilities which the best educational theory assigns to him? This is a question which cannot be answered in general terms. Perhaps the best answer available is to be found in an analysis of the actual time which the principal devotes to supervisory activities.

Eikenberry<sup>13</sup> reported that in relatively small high schools (500 pupils or fewer) the most important activity of principals, from the standpoint of time spent, was the teaching of classes. The median time for schools of all sizes was 138 minutes per day (38 per cent of the total school day). Routine work consumed, on the average, 40 minutes per day (11 per cent of the total school day) while the supervision of instruction ranked third, 36 minutes per day being devoted to this activity (less than 10 per cent of the total school day). This study would indicate that supervision is recognized as an important function of the principal, but it is quite evident that it is far from occupying the center of the stage. The reasons for this apparent neglect are not difficult to find.

<sup>12</sup> Johnson, Franklin, *Administration and Supervision of the High School*, p. 339. Ginn and Company.

<sup>13</sup> Eikenberry, Dan H., *Status of the High School Principal*, U. S. Bureau of Education Bulletin, No. 24, 1925, pp. 51-54. For a general statistical treatment of the subject, see: Ayer and Barr, *op. cit.*, pp. 104-111. These authors conclude that a considerable amount of the principal's time, even in small school systems, is given to supervision. No opinion is expressed as to the adequacy of the time spent.

In the first place, the necessity for adequate professional training on the part of the principal has not been recognized. As Johnson points out:

Principals have usually been selected because of their social and executive qualifications, and they have naturally developed in the direction of routine efficiency in dealing with the personal or managerial problems of the position as commonly conceived.<sup>14</sup>

Teacher-training institutions and state departments of education have been slow to recognize the need for specific courses of instruction dealing with administrative and supervisory techniques.<sup>15</sup> The result is that, in many cases, the principal does not possess the essential qualifications to carry out an effective supervisory program. Consequently, he devotes his time to those things which he can do well and which are recognized by him as being fundamental. For example, it is not unusual for a high-school principal to spend more time in conferring with

<sup>14</sup> *Op. cit.*, p. 339.

<sup>15</sup> For an excellent discussion of the type of professional training needed by the high-school principal, see:

Eikenberry, Dan H., "The Professional Training of Secondary School Principals," *School Review*, XXXVIII (September, 1930), pp. 498-509. The article concludes with the following significant statement:

"The goal toward which the training institutions and state departments of education should strive is complete training before the principalship is entered. In America the time has long passed when doctors were permitted to practice without adequate preparation. The young medical student is not permitted to study two or three years, practice medicine a year or two, study another year or two, practice two or three more years, and then complete his medical training. Even at the completion of his six or seven years of training, the doctor is not permitted to practice until he has given satisfactory evidence, by passing comprehensive examinations, that he is completely qualified. Sometime it will be realized that directing the destinies of adolescent boys and girls is as important as treating them for measles, mumps and whooping cough. When the teachers in colleges and universities, state authorities and principals realize the importance of the high school principalship, all will work together for a program of professional training that will elevate the position to the place it deserves among the major professions" (p. 509).

pupils concerning absence or tardiness or disciplinary problems than in the supervision of instruction. In many cases when he does attempt to supervise, to use Orville G. Brim's<sup>16</sup> apt designation, he is a "trouble-fixer" rather than an educational leader.

In the second place, many superintendents and boards of education have failed to provide the principal with the necessary clerical assistance to free him from the tyranny of routine activities. In many of the smaller high schools, no clerical service of any kind is provided for the principal's office. He is therefore forced to spend much of his time in the performance of work which is well within the range of ability of a first-class secretary. The folly of securing a high-salaried executive and then requiring him to perform clerical duties should be apparent to all discerning boards of education and superintendents.

In the third place, in the smaller high schools, as shown by Eikenberry's study, the principal is required to devote most of his time to actual teaching. While immediate contact with pupils in the classroom is desirable, yet even in small schools this should be so reduced as to make possible the carrying out of an adequate program of supervision.

The first condition, then, which must be met in the organization of secondary-school supervision is the professionalization of the principalship. As Brim points out:

He [the principal] must be a leader, able to organize teachers into a dynamic working group. He must possess enthusiasm and vision. He must be able to discover needs and plan a program of study. He must be able to organize the work, to direct the study, and to guide the discussion profitably. Leadership is here at a premium.<sup>17</sup>

<sup>16</sup> "The Supervising Principal as Trouble-Fixer or Educational Leader," *Educational Administration and Supervision*, XII (September, 1926), pp. 413-419.

<sup>17</sup> *Ibid.*, p. 419.

The department headship in the larger high schools affords an unusual opportunity to make supervision function vitally. In the very nature of the case, the principal cannot be a teaching specialist. Hence, his supervisory activities, while very significant, must be of a general nature. The department head, if chosen upon the basis of supervisory as well as teaching ability,<sup>18</sup> may supplement the services of the principal by giving expert leadership in his particular field. The proper coördination of these two distinct types of supervisory activity is essential to a program of supervision. Incidentally, efficient department heads may relieve the principal of much of the routine duty, which saps his vitality and consumes the major portion of his time, by assuming administrative responsibility for the conduct of departmental affairs.

That the department headship as a part of the administrative and supervisory organization is not universally recognized is indicated by a recent study made by Harlan C. Koch of the University of Nebraska.<sup>19</sup> He surveyed the administrative and supervisory functions of 910 department heads in 171 high schools, located in 114 cities of a population of 30,000 or over, covering 31 states selected from every section of the country. He also addressed an inquiry to 369 superintendents concerning the presence or absence of department heads in their high schools. Fifty-eight of these

<sup>18</sup> In some high schools a chairman is elected by the members of the department annually. Without a doubt this method has much to recommend it, since its democratic nature tends to insure coöperation. However, in many cities where this policy is in use, the position is little more than honorary, no extra compensation being allowed. Responsibilities and duties are therefore negligible. In view of the vast amount of work which should be carried on, it would seem wiser to select more or less permanent leaders upon the basis of their academic and professional qualifications and compensate them accordingly.

<sup>19</sup> "Some Aspects of the Department Headship in Secondary Schools," *School Review*, XXXVIII (April, 1930), pp. 263-275; and "Is the Department Headship in Secondary Schools a Professional Myth?" *School Review*, XXXVIII (May, 1930), pp. 336-349.

superintendents failed to reply, while eighty, or 25.7 per cent, stated that they did not have department heads in their schools. The four principal reasons given for their policy are the following: (1) "The work can be done more effectively otherwise," (2) "It tends to destroy the unity of the organization," (3) "It increases cost; no evidence that results will justify the cost," and (4) "The superintendent is opposed to 'pyramiding' supervision and administration."

Unfortunately, information is not available as to the opinions of all the principals of the same schools covered by the above inquiry. However, we are informed that in the opinion of the high-school principals who reported, "the strong points of the position . . . far outweigh its weaknesses."

It would appear, from a consideration of the relatively large percentage of city superintendents opposed to the office and the reasons for such opposition, that the department headship has not clearly justified itself as a significant phase of supervisory organization. At the same time, it is equally clear that this opposition is based upon grounds which are not inherent in the office and which would hardly justify rejection upon the basis of good educational theory. Certainly heads of departments cannot function in administration or supervision if they are not given time to do so. Fifty-eight of the department heads included in Koch's study reported that they had no time whatever to devote to either of these activities, while over half of the number reporting stated that they had but one free period for work other than teaching. It is problematical, according to the investigator, how much of their free time is actually given over to supervision. Koch concludes his study as follows:

There can be no denying the fact that the department headship is in confusion. There is apparently little agreement among school administrators as to what in actual practice its function should be. No generally accepted criteria of selection of individuals for the position are operative. With disconcerting frequency inappro-

inadequately trained persons are found in the position. The prerogatives of heads of departments are severely limited. Too little freedom from routine is granted for leadership of the department. Yet none of these weaknesses is inherent in the office itself.

Superintendents and principals should either make the headship effectual in the fullest significance of the term or abandon it. Otherwise, as one of their number has aptly said, "they are perpetuating a myth"—and the extent to which the headship is now a myth scientific experimentation alone can determine.<sup>20</sup>

The following suggestions are proposed as a means of vitalizing the work of the department head so as to make it a significant factor in secondary-school supervision:

1. The prevailing methods of selecting department heads upon the basis of seniority, popularity, or even scholarship alone, should give way to a procedure which will secure individuals with a high degree of professional training, not only in the field of departmental specialization but also in the field of administration and supervision.

2. The department head should be recognized by the administrative officers of the school system as an integral part of the supervisory staff. In this capacity he should assume departmental leadership in (1) constructing and revising courses of study, (2) promoting and stimulating experimentation in teaching procedures, (3) improving teaching and learning conditions through visitation and conference, departmental meetings, and the like, and (4) integrating and guiding the work of the various members of his department. In addition to this program of supervision he will, of course, work with the principal and the other department heads in coordinating the entire work of the school, and in determining administrative and supervisory policies.

3. In order to make effective the program outlined above, it is necessary that sufficient free time be allowed for this

<sup>20</sup> *School Review*, XXXVIII (May, 1930), pp. 348-349.

purpose. His teaching schedule should be so arranged that different periods of the day may be made available for supervisory activities. Compensation proportional to the responsibilities of the office should be provided for.

If the above conditions are met, it is probable that the department headship will be transformed into a living, vital element in secondary-school supervision, instead of remaining a "myth."

It may be argued that, with the department head playing such a dynamic rôle in supervision, there is danger of conflicts in authority between department heads, the principal, special supervisors, and the superintendent, with the resulting confusion and discontent. That this is possible is readily admitted. The remedy, however, does not appear to be in adopting a line-and-staff policy with a sharp differentiation of powers, but rather in carefully coördinating the various functions performed by each of these officers. Here, as in most of the human relationships already discussed, the democratic ideal of vital sharing must be practiced.

This involves the formulation of a program of supervision in which tentative goals and standards are all arrived at coöperatively.

A third factor in the organization of the high school for supervision is the organization of the teaching staff for active participation in the school program. The committee system serves to make possible this coöperative endeavor and becomes the means of bridging the gap between the classroom teacher and the primary administrative staff. One of its particular merits is its flexibility, the particular form which it takes being wholly dependent upon the problems which arise.

Special curriculum committees,<sup>21</sup> functioning through department heads, may undertake either a general or a partial

<sup>21</sup> See Chapter XI for a program which utilizes the entire teaching staff in a curriculum-revision program.



revision of the curriculum. Teachers of particular groups of subjects may consider problems of articulation and coördination through appropriate committees. Procedures for meeting individual differences is another fruitful field of study which may be undertaken by properly organized groups of teachers.

In all of these enterprises, the principal, his assistants, the department heads, and special supervisors furnish the leadership. The principal is primarily charged with securing an integration of the entire program. To him belongs the difficult task of seeing the educative process in all of its broad relationships, and in reconciling the divergent forces so as to achieve the greatest possibilities for complete development on the part of the pupil. Necessarily the department head and the special supervisor are primarily interested in the particular field of their specialization. It is in the work of the development of special techniques, the critical analysis and evaluation of particular subject matter, and similar highly specialized matters, that these specialists may make their greatest contribution.

It must not be forgotten, however, that the classroom teacher, with his intimate knowledge of his pupils, his constantly available laboratory for experimentation and application of theories to concrete situations, is absolutely essential to the complete organization of the secondary school for supervision.

When these three significant factors in a supervisory organization — the principal, the department heads, and the teaching staff — are properly coördinated, the result is a dynamic instrument for promoting the fullest and freest development of human potentialities through genuine social living.

Our closing chapter will consider in some detail the application of this general point of view toward supervisory organization to some of the problems of the secondary school, and will

suggest ways and means of organizing the teaching staff for professional growth.

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## CHAPTER XX

### ORGANIZING THE HIGH SCHOOL FOR TEACHER GROWTH

A supervisory policy which is based upon the conception that teacher growth is to a large extent determined by opportunities which the teacher has to share in the development and carrying out of the educational program should make adequate provision for active teacher participation. The only alternative is to *impose* the program of the superintendent or principal upon the school system.

A good example of a procedure which ignores this fundamental conception is proposed by Stuart A. Courtis in discussing the means for making teacher rating more effective. He says:

... the superintendent, as the chief executive officer of the Board of Education, should formulate and recommend to the Board for adoption, the philosophy of education which he "feels" is the *best* philosophy. He ought, of course, to review all existing philosophies, and the arguments in favor of each, before making a choice, but there is no escaping the fact that *choice* of a basic philosophy is an arbitrary matter to be decided in terms of feelings of worth by the person who is responsible for making decisions.

There is no way known to man by which the relative value of different philosophies may be determined. Yet indecision in policy and executive action inevitably entails conflict and waste. A school system without order and coördinated effort is inefficient and full of harmful conflicts. Intelligent planning and scientific determination of the "*best*" means of achieving the selected goal both become possible as soon as the goal itself is defined. The selection of the goal is the critical factor. As soon as a basic

philosophy has been adopted by a Board of Education, and put into effective operation as a standard of judgment, consistent evaluation becomes as easy as consistent description and may be delegated. On the other hand, a superintendent, operating without a decisive formulation of philosophy, is the only person who is able to evaluate intelligently.

Many persons throw up their hands in holy horror at the mere thought of serving in a school system with a defined philosophy and scientific evaluation in terms of the fixed standards of merit.

"Are teachers to be given no freedom of choice?" they ask. "Would not such a system 'steam-roller' all teaching personality and reduce professional effort to a mechanical, lifeless process?"

The fear would be well grounded if in such a system no provision were made for experimental variation from standard ways. . . . There is a great difference between intelligent humble-minded standardization with adequate provision for experimental variation and, on the one hand, the inevitable anarchy resulting from independent choice of philosophy by each teacher, and on the other, the crushing rigidity of standardization by an administration which believes implicitly that *it* knows the best and brooks no variation from its decisions.<sup>1</sup>

It is possible to grant the difference suggested by Courtis, and share with him his distrust of both anarchy and capricious autocracy. However, one may reject these alternatives and also his solution of the problem raised by the dilemma. As a counter proposal it is suggested that the evolution of a basic philosophy and the resulting tentative standards of judgment of satisfactory learning and teaching be made the vital concern of each member of the organization. True, there will be individual variation, and such variation should be encouraged, but out of these variations will emerge, under proper guidance, a conception of ends and values which will enlist the support of the entire organization and which cannot be said to represent the "feelings"

<sup>1</sup> *Scientific Method in Supervision*. Second Yearbook, National Conference of Supervisors and Directors of Instruction, pp. 281-282.

of any one member of the group. Human history is crowded with too many instances of devotion to common ends to make it necessary to discuss the point at length. The difficulty in most high schools is not that the teachers are incapable of agreeing upon a basic philosophy of education which permeates their contacts with pupils and fellow teachers, but that there is no machinery by means of which such a philosophy may become articulate and no guidance which has for its aim the development of a unified point of view. Once the supervisor recognizes the need, the means of organization will be found which will serve as a clearing house for ideas, and which will ultimately preclude the necessity for the arbitrary determination of educational programs.

The committee system, if properly carried out, serves as an effective means for the securing of teacher participation in coöperative endeavors. At Decatur, Illinois, according to a report by the principal, Thomas M. Deam, the following sixteen standing committees aided in the administration of the high school: (1) Cabinet, (2) Professional Advancement, (3) Scholarship, (4) Registration, (5) Health, (6) Publications, (7) Carnival, (8) Corridors and Care of Building, (9) Library, (10) Art and Decoration, (11) Assemblies, (12) Parents' Club, (13) School Life, (14) Thrift, (15) Exhibits, (16) Athletics.<sup>2</sup> This example illustrates the extent to which teacher committees may be utilized in high-school administration. Possibly in some schools this plan of participation is carried to extremes by organizing large numbers of "standing committees" which in many cases fail to function. Franklin W. Johnson presents a very interesting instance of such a case. He reports:

The writer once had occasion to interview a principal who had thirty-one standing committees of his faculty. It is quite impossible to conceive any useful purpose to be served by such an imposing

<sup>2</sup> "Teacher Coöperation in the Administration of the High School," *School Review*, XXXIII (February, 1925), pp. 126-130.

array, and it is reasonable to assume that committee assignments in that school are not taken as involving serious responsibility.<sup>3</sup>

It is possible, however, by limiting committees to the performance of specific functions which are well within the interests and abilities of the members of the teaching staff and then holding them responsible for results, to utilize the contributions of the teaching staff to great advantage. The particular functions which may be properly performed by teaching staff committees will, of course, vary with the problems of each particular school. Yet there are some general suggestions which are more or less applicable to all schools.

First of all, the administrative and supervisory staff should enlist the aid of the teaching staff in the formulation and carrying out of important school policies. This may be done in an informal manner, by "calling in" well-qualified teachers from time to time and consulting with them. As Roscoe Pulliam points out:

It has become a fairly general practice to call teachers into consultation in planning the course of study, selecting the textbooks, and determining the educational policies of the school, particularly in places where the teachers show themselves to be well trained and highly competent people with interest and initiative — people who obviously can make some contribution to the general improvement of the schools. In fact, under the circumstances just described, there has probably always been some teacher participation in administration. It is not likely that there have ever been many superintendents so autocratic that they never consulted any of their teachers about school policies.<sup>4</sup>

The difficulty with such participation is that it is too incidental and random to result in much permanent improvement either in the school or in the professional attitude of the teaching staff. What is needed is some type of organ-

<sup>3</sup> *Op. cit.*, p. 96.

<sup>4</sup> *Extra-Instructional Activities of the Teacher*, p. 418. Copyright, 1930, by Doubleday, Doran and Company, Inc. Used by permission.

ization by means of which the entire teaching staff may come to feel its responsibility for the initiation of school policies. This is possible only if some representation of the teaching staff is regularly provided for by the administrative and supervisory groups.

One of the best means for meeting this need is the "cabinet," or so-called "teacher council," which is usually made up of classroom teachers, department heads, special supervisors, and the principal and his immediate staff.<sup>5</sup> When constituted in this manner, such councils are democratic in character in that they represent the various points of view and interests.

The particular functions which such councils perform must be determined almost entirely by local conditions. E. J. Ordman made a study of the constitutions of about fifty of these councils and reports a wide variety of purposes. He groups them under the following heads:

To act as advisors, to promote coöperation, to promote the welfare of the school, to raise the standard of the teaching profession, to assist in financial readjustment, to develop the feeling of responsibility in teachers, to offset the move to affiliate with the American Federation of Labor, to participate in community affairs, to give teachers an organized means of expression and to advise with the superintendent on school matters.<sup>6</sup>

It is evident that many of these purposes are purely local in character<sup>7</sup> and, consequently, of little direct value in

<sup>5</sup> One element which has caused many superintendents and principals to look askance at "teacher councils" is the fact that in some instances they have been made up entirely of teachers — all too often seeking personal advancement rather than the general improvement of the system as a whole. For an interesting example of teachers' councils from which principals were expressly *excluded*, see: Counts, George S., *School and Society* in Chicago, Ch. VII.

<sup>6</sup> *National Education Association Addresses and Proceedings*, Vol. 59 (1921), pp. 295-296.

<sup>7</sup> For an example of a council organized for a very specific purpose, see: Pollick, R. E., "An Experiment in Moral Education," *Elementary School Journal*, XXVI (May, 1926), pp. 674-682.

formulating a program, but they do throw considerable light upon the type of problems which may be undertaken by teachers under guidance. Implicit in most of these purposes is the desire of teachers to have a voice in the determination of school policies.

Assistant Superintendent F. E. Willard of Seattle reports a suggestive use of a "superintendent's advisory council."<sup>8</sup> It consists of representatives from each school and grade, selected by the "Grade Teachers Club," which is a representative organization. It meets at least twice during each semester with the superintendent and his staff "for the discussion of any question which any one wants to propose." While many of the problems discussed appear to be somewhat trivial and not closely related to basic school policy, yet the plan does afford an excellent example of attempts which are being made to promote teacher growth through active participation.

An interesting example of an attempt to secure wider participation in the formulation and execution of policy through the establishment of a central organization is afforded by the Division of Teacher Training of the Ohio State Department of Education. An Advisory Committee consisting of representatives of the various types of teacher-training institutions in the state has functioned for a period of three years. These representatives, together with the Supervisor of Teacher Training, meet several times a year for the purpose of discussing the major issues in teacher training and of initiating new policies. No major changes in policy are made, or new standards adopted, without the approval of this Committee. Several sub-committees, such as "The Student Teaching Committee," "Committee on

<sup>8</sup> *National Education Association Addresses and Proceedings*, Vol. 63 (1925), pp. 111-112. While this council includes only elementary teachers, it affords a suggestive procedure for the organization of secondary-school councils as well.



Entrance and Guidance," and a number of Curriculum Committees, which are working on revisions of the subject matter and professional curricula, are functioning effectively.<sup>9</sup> One of the latest developments is the appointment of "Professionalized Subject-Matter Committees" in the various fields. While this plan is not entirely applicable to secondary-school conditions, it does illustrate that a democratic program may be developed even on a state-wide basis.

The Ethical Culture Schools of New York have for a number of years encouraged teacher participation in the formulation of school policies through teachers' councils. The growth of the system has made necessary a new type of organization which is designed to afford adequate representation to each of the school units. The new constitution, which becomes effective this year, is reproduced below.

#### CONSTITUTION OF THE TEACHERS' COUNCILS OF THE ETHICAL CULTURE SCHOOLS

The Faculties in the different divisions of the Ethical Culture School, together with the Rector, shall be designated as Teachers' Councils. Upon authorization by the Rector of the Schools and the Board of Governors, these shall each organize and arrange for meetings in a manner which, in the judgment of the Council, is best suited to meet the needs of the division concerned.

There shall be the following School Councils:

- (a) Main School
- (b) Fieldston School
- (c) Branch School
- (d) Fieldston Lower School

Each of the Councils shall arrange to elect an Executive Board, a majority of which shall be teacher members of the Council.

<sup>9</sup> For a discussion of the work of these Committees, see: Alberty, H. B., "The Teacher Training Program of the Ohio State Department of Education," *Educational Research Bulletin*, VII (May, 1928), pp. 199-206.

Elected members of the Executive Board shall have served the School as teachers for at least three years.

Each Executive Board shall choose from among its members at least one teacher, but not more than one for every 25 members of the staff, who, with the representatives of the other Executive Boards and the teacher representative on the Board of Governors, *ex officio*, shall constitute the 'Teachers' Advisory Committee. From among all the Executive Boards there shall be one teacher elected by the staffs of all schools, the teacher representative on the Board of Governors.

Elections of Executive Boards shall take place during the second week after the opening of school; election of the member or members on the Advisory Committee, during the third week; and of the teacher member on the Board of Governors during the fourth week. The election of the representatives on the Advisory Committee shall become effective upon its validation by the Educational Director. The election of the teacher representative on the Board of Governors shall become effective upon validation by the Rector.

Terms of office of members of Executive Boards and the manner of their election shall be determined by each of the Councils. Chairmen of Councils and of Boards shall be teachers.

It shall be the function of the Council:

1. To discuss and make recommendations to the Board of Governors — through the Rector — concerning school policy.
2. To provide in the manner herein described for an Advisory Committee to the Educational Director.
3. To provide in the manner herein described, a teacher representative on the Board of Governors.

Under these general provisions, each school organizes its own council and executive board. The following is the constitution under which the Fieldston Council operates:

#### CONSTITUTION OF THE FIELDSTON 'TEACHERS' COUNCIL

The Teachers' Council at Fieldston shall elect, during the second week after the opening of the school year, four teacher members

who, with the Principal as *ex officio* member, shall constitute the Executive Board of the Teachers' Council.

During the third week the Executive Board shall designate one of their number as a member of the Teachers' Advisory Committee, and shall submit this designation to the Educational Director for his approval.

The Executive Board shall elect its own officers and shall arrange to conduct the business of the Council at its own discretion and in a manner which, in its judgment, will best serve the interests of the Council, with the provisos, however, —

1. That it formulate a plan for stated meetings of the Council at least twice a year.
2. That it provide for a referendum of questions to the Council when such referendum, in the opinion of at least two members of the Board, seems necessary.
3. That it provide machinery whereby initiation of business by members of the Council shall be made easy.
4. That it announce dates of its meetings and publish its agenda so that such members of the council as may wish to attend meetings of the Board and participate in its deliberations may do so.

These articles of organization shall take effect upon approval by the Rector and the Board of Governors in September, 1930.

It will be noted that these constitutions are very flexible and free from prescriptions of specific functions and rules of procedure. This makes it possible for the groups to operate unhampered by red tape. These groups are encouraged to discuss fully and frankly every aspect of school policy. No problem which vitally affects the school is regarded as being outside the jurisdiction of the Councils or of the advisory group.

To what extent teachers may effectively participate in the formulation of school policy is, of course, entirely relative to local conditions. Doubtless the effective operation of such plans depends to a very large extent upon the leadership of the principal and his staff. If he has the autocratic con-

ception of administration and supervision which brooks no interference with his policies, there is little opportunity on the part of teachers to exercise initiative. In such cases, councils, if they exist at all, are apt to be considered as a "thorn in the flesh" by the principal, rather than as coöperative enterprises designed to promote the general welfare of the school. On the other hand, if the principal is a trained educational leader who sees in teacher participation an opportunity for effective supervision, the council may result in accomplishing a two-fold purpose — teacher growth and more effective administration.

It should be pointed out, also, that the professional training and spirit of the teaching staff is an important factor in the success of teacher participation in forming and carrying out school policies. If the staff is not professionally minded and is not bound together by a large number of common interests, it will not, as a rule, care to participate to any great extent, or if it does, it may not be actuated by the highest motives. However, the responsibility for such a condition rests in part with the administrative staff. It is largely a question of leadership. The ideal situation is, of course, a combination of democratic leadership and a highly trained group of professional workers.

There is, however, no school so lacking in leadership and professional spirit that small beginnings in coöperative undertakings may not be made. Initially these may have little or no relation to the more general policies of the school, but instead may center upon the experimental study of problems directly related to immediate classroom situations. One of the most illuminating examples of this type of coöperative enterprise is afforded by the work of C. W. Washburne at Winnetka.<sup>10</sup> The teachers were organized in subject, grade, or seminar groups for the study of "problems

<sup>10</sup> Washburne, C. W., "Organizing Public Schools for Research," *Journal of Educational Research*, X (December, 1924), pp. 364-368.

intimately connected with the methods and subject matter of the grades represented." These various groups attacked problems dealing with the curriculum and methods of instruction. Much of the instructional material which has been developed at Winnetka is the direct outcome of a highly effective coöperative research program.<sup>11</sup>

One of the most extensive plans for organizing the teaching staff for the study of teaching problems is reported by Barr and Burton. This plan was designed to stimulate teacher experimentation in instruction, and to provide a means for utilizing the individual teacher's contribution in the general improvement of the school system. A detailed description of the plan follows:

Detroit has a large force of keen, well-trained, and experienced teachers. Many of these teachers are making valuable contributions to classroom organization and management and to the technique of teaching, but, because of the very largeness of the system, many ideas and plans useful to the city as a whole are lost. A plan follows for systematically collecting and conserving for the entire teaching force the most valuable examples of experimental teaching. For those teachers who make such contributions suitable recognition is provided.

1. The plan as here outlined includes instructional experiments and variations from the standard classroom procedure of the following types: (a) variations of instructional records and forms, (b) changes in the course of study, (c) suggestions for better class-

<sup>11</sup> For other interesting examples of coöperative supervision, see: *Scientific Method in Supervision*, Second Yearbook of the National Conference of Supervisors and Directors of Instruction. Chapter XIX, written by Frances Dearborn, entitled "Coöperative Supervision in Los Angeles," is especially illuminating. Miss Dearborn concludes her discussion with this significant statement: "Teachers can often sell to each other ideas which are less popular when presented by a supervisor in a formal meeting. Similarly, teachers are often able to explain clearly and in concrete terms that which a supervisor makes too theoretical. For this reason, supervisors today are finding it worth their while to adopt the longer and more circuitous route of coöperative planning instead of playing a 'lone hand' in working out instructional activities" (p. 261).

room organization and management, (d) improved methods of teaching, (e) experimental investigations, and (f) child welfare.

2. Teachers having such suggestions and modifications to submit should state in not more than three hundred words: (a) exactly what the experiment is ["experiment" as here used includes all such variations in standard procedure as are listed in Paragraph 1], (b) when the experiment was started and when it will end, (c) why the experiment is especially worth while, and (d) how the results may be used throughout the school system. This statement should be accompanied by such printed and mimeographed materials and data as are available. The statement must carry the approval of the principal of the school concerned.

3. On receipt, by the Department of Supervision, of a statement that an experiment is being conducted, the work will be inspected by the supervisor concerned. The supervisor at the time of his visit will be glad to discuss the work and give such assistance as is possible.

4. Each experiment or piece of work will be rated A, B, or C. A "C" experiment is one worthy of mention but not recommended for further use in the system. A "B" experiment is one of average promise and should be used as a basis for more extensive experimentation. An "A" experiment is an exceptionally good experiment which can be put into immediate use throughout the schools.

5. Only original experiments (experiments new to the system) will be accredited. Original experiments will be interpreted to mean those not covered by previous reports from teachers, or by written materials from the supervisory and administrative groups, or by publications of the Detroit Board of Education.

6. Each experiment will be recorded on the teacher's efficiency rating card as evidence of professional leadership and ability.

7. When materials have been accepted for city-wide use, the contributing teacher may, if she so desires, present in person the materials to the district principal or principals.

8. The *Detroit Journal of Education* will be glad to print, over the contributors' names, summaries of a limited number of such studies.

9. For those teachers who care to avail themselves of the opportunity, credit will be given by the Detroit Teachers College.

Teachers desiring such credit must make the request in writing at the time of initiating the experiment, in order that suitable conferences and readings may be planned. Credit can be given only under such conditions.<sup>12</sup>

If one may judge from the large number of problems submitted and the experiments carried out, the plan was highly successful in stimulating experimentation. Perhaps a less formal plan, freed from the connection with arbitrary grades and ratings, would result in more permanent and whole-hearted endeavors. Certainly this would be true in smaller systems where more intimate personal contacts between supervisor and teacher are possible.

Closely related to the organization of the school for the solution of group problems is the provision which is made for coöperation between the teacher and the supervisor in the solution of individual problems. While this requires no formal organization, it must, nevertheless, be carefully provided for in the supervisory organization. A number of interesting examples of such problems are given by Earl Hudelson. The following is typical:

A teacher of stenography questioned the value of requiring her pupils to practice turning printed English into shorthand. Each pupil was required to have a volume of printed exercises and to spend at least fifteen minutes each day transcribing the exercises into stenographic characters. This was customary; she had had to do it as a pupil, her colleagues were requiring it, and textbooks recommended it. Nevertheless, she wondered. Finally she took her doubts to her supervisor. Instead of assuming an air of omniscience, he proposed that they find out. They devised a sound experimental technique, prepared careful objective test materials and conducted an experiment. It consisted of a control group that was taught in a customary way and a paired experimental group that in lieu of the transcription drill was given fifteen minutes per day additional drill in taking oral dictation. The teacher

<sup>12</sup> *Op. cit.*, pp. 389-390.

dictated the same material that the control class transcribed from the book.

At the end of the term she gave both classes the same tests. One consisted of a series of oral dictation, the other of comparable printed exercises to be transcribed into shorthand. All papers were objectively scored. The experimental section was significantly more accurate on the dictation test and slightly superior on the transcription test. But, the teacher and her supervisor agreed, the ability to transcribe printed material into shorthand is not important for stenographers; so there is at least one commercial teacher who, with her supervisor's sanction, has discontinued the practice of training pupils in an unimportant ability by an inferior method, and is spending the time training them in an important ability by (for her, at least) a superior method.<sup>13</sup>

Organizing the high school for a program of curriculum construction and revision is another effective means of promoting teacher growth. In this task the committee system, referred to earlier in the discussion, has been found to be very effective. In most high schools, the organization for this important activity would consist first of all of a "General Council," or "Clearing Committee," made up of the principal and his supervisory staff, the heads of subject-matter departments, and representative classroom teachers. This committee should have general charge of planning and carrying into effect the program. In addition to this general committee, there should, of course, be subject committees, made up primarily of classroom teachers, and such special committees as are needed to carry out the proposed plan.<sup>14</sup>

<sup>13</sup> *Educational Supervision*. First Yearbook, National Conference on Educational Method, pp. 213-214. Taken from an unpublished report by Beatrice M. Waite, of the College of Education, University of Minnesota, 1925.

<sup>14</sup> For a detailed discussion of the principles underlying programs of curriculum construction, see Chapter XI. For a discussion of the special functions of the various committees, see: Hopkins, L. T., *op. cit.*, Problem VIII, pp. 287-338. The procedures which have been followed in curriculum-building programs in a number of the large cities are set forth in the *Twenty-sixth Yearbook*, National Society for the Study of Education, Part I.



The foregoing discussion suggests that when the school is properly organized for the study of educational problems, the need for the formal teachers' meeting, at which the attendance of all teachers is compulsory, will tend to disappear.

That these general meetings have, for the most part, been dead, is well known to teachers and administrators alike. The usual procedure is to devote a large portion of the period to the making of routine announcements which could be disposed of more effectively by mimeographed bulletins. The remaining time is frequently given over to the study of some book usually adopted for state, city, or county-wide use. Occasionally such books serve an excellent purpose, especially when selected with special reference to the particular problems which a school system is facing, but more frequently their reading represents just another routine task to be performed.

With the new attitude toward supervision as educational leadership, the teachers' meeting will be transformed into a laboratory work-period in which teachers with common interests plan, attack, and solve their problems. Books, periodicals, and other materials which throw light upon their problems will be utilized in precisely the same manner as the student makes use of the library. This change from passive receptivity to active participation parallels the changes which are taking place in the progressive schools with respect to pupil activity. In other words, the changed conception of learning as self-activity must be applied not only to the growth of pupils, but also to the growth of teachers.

When the major emphasis of the supervisory staff is given to organizing the teaching staff for the study of its major problems, and the stimulating of the individual teacher to grow through an experimental study of his problems, the result is also beneficial to the supervisory staff. This point is well developed by Orville G. Brim in the following statement:

Furthermore, in organizing the teaching force for study of this sort, a division of labor is expected. The superintendent can make certain of his teachers responsible for certain topics about which they already know more than he, and do so without apology. He can hold himself responsible for the more general educational principles and values upon which he should be prepared to speak. In this way the peculiar ability and thinking of each one accrues in part to the benefit of all. This organization of work about some constructive problem with its attendant atmosphere of interest, enthusiasm and coöperative effort, especially with its promise for stimulating teachers to grow, to see new and better procedures, to discover their own shortcomings, to become, in fact, their own trouble-fixers, relieves the principal of much time-consuming detail, annoying both to himself and to the teacher, and with the division of labor thus made possible, a principal could increase very materially the effectiveness of his own educational leadership.<sup>15</sup>

The principal, emancipated from the slavery of meticulous attention to routine, and from the necessity for being a subject-matter expert in all fields represented in his school, is free to grow professionally along with his teaching staff because he becomes one with it in the execution of a common program.

When the school is organized upon a democratic basis so that all of the professional workers — teachers, supervisors, and administrators — feel a direct responsibility for the attainment of the objectives of education, the conditions for professional growth are fulfilled. The school then becomes a community in a very real sense because of the inevitable "sharing of interests" which results from intimate personal contacts between all members of the group. This coöperative spirit cannot fail to penetrate to the larger group which includes the other social agencies of the community. At the same time, it marks the beginning of genuine socialization of pupil-teacher relationships.

<sup>15</sup> Brim, Orville G., "The Supervising Principal as Trouble-Fixer or Educational Leader," *Educational Administration and Supervision*, XII (September, 1926), pp. 413-419.

Teachers are frequently admonished to make their classrooms over into little communities held together by common bonds rather than by administrative machinery, but unless the teacher lives and moves in a socialized atmosphere, his efforts must indeed be feeble and discouraging. If his own initiative is crushed out by autocratic control and arbitrary imposition of plans, it is probable that he in turn will find it easier, and more in accordance with the policy of the school, to impose his authority upon his pupils. On the other hand, when supervisor-teacher relationships are decently socialized, the teacher will find it much easier to cultivate a democratic relationship with his pupils.

If the improvement of learning conditions and the professional growth of teachers be accepted as the major objectives of supervision, then the supervisor will see in his task very different problems from those with which supervisors have been traditionally concerned. "Helping the teacher" will for the most part take the form of improving the environment under which he works, rather than in attempting to change his habits and modes of procedure by more direct means. In like manner, instead of admonishing pupils to be social, they will be afforded the opportunity of actually engaging in social living. In the process of socializing the school community, the supervisor will find his greatest opportunity of service, and as a result, will liberate his own potentialities.

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